School Education & Literacy Department
Government of Sindh

Teacher Training on Foundational Learning in Early Grades

ASPIRE
ACTIONS TO STRENGTHEN PERFORMANCE FOR INCLUSIVE AND RESPONSIVE EDUCATION

TRAINEE MANUAL & RESOURCE MATERIAL FOR TEACHERS

Developed by:
Reform Support Unit
School Education & Literacy
Department, Government of Sindh

Approved by:
Sindh Teacher Education
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Government of Sindh

Actions to Strengthen Performance for Inclusive and Responsive Education (ASPIRE) Program

at

Reform Support Unit

School Education & Literacy Department

Government of Sindh

TRAINEE MANUAL & RESOURCE MATERIALS ON FOUDATIONAL LEARNING FOR TEACHERS

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Abbreviations Used

ASER	Annual Status of Education Report
CPD	Continuous Professional Development
ECE	Early Childhood Education
ECCE	Early Childhood Care and Education
ECCE & FL P	Early Childhood Care, Education and Foundational Learning Policy
ECT	Early Childhood Teacher
EFA	Education for All
FL	Foundational Learning
MATTERS	Mentorship, Administration, Teachers, Teaching, Extra Support, Regular Assessment and Standards
M&E	Monitoring and Evaluation
NCF	Nurturing Care Framework
OOSC	Out of School Children
RTE	Right to Education
SDGs	Sustainable Development Goals
SE&LD	School Education and Literacy Department
SESP&R	School Education Sector Plan and Roadmap
TLM	Teaching Learning Material
TTI	Teachers Training Institute
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
WHO	World Health Organization

1. Preamble

Welcome to the 12-Day Teacher Training Manual – a comprehensive, step-by-step guide meticulously designed to empower primary school teachers in effectively executing foundational learning across ASPIRE target districts in Sindh province. This document is shaped by insights drawn from a robust Training Needs Assessment (TNA) Survey, ensuring that the training is precisely tailored to address educational gaps.

The core objective of this manual is to elevate teaching excellence by enhancing both Pedagogical Knowledge (PK) and Content Knowledge (CK). This dual approach strengthens Foundational Literacy, Numeracy, and Socio-Emotional Skills for children from Early Childhood Education (ECE) to Grade 3. Through the proven methodologies, this manual equips the teachers with essential strategies to develop children's listening, reading, writing, foundational mathematical, and socio-emotional skills, fostering a solid academic foundation in the crucial early years.

With a strong emphasis on empowering primary teachers with the necessary expertise to deliver high-impact Foundational Learning instruction, this program is designed to:

- Equip teachers with effective pedagogical strategies for teaching literacy, numeracy, and social skills in both monograde and multi-grade classrooms.
- Encourage the integration of innovative teaching materials and resources to enhance student engagement and learning outcomes.
- Standardize effective assessment tools and techniques to measure student progress accurately and meaningfully.
- Support teachers in creating inclusive learning environments that nurture holistic development and foster equity.

Designed with precision, this manual integrates activity-based, hands-on training methodologies, ensuring that teachers acquire practical, classroom-ready skills. By employing a learner-centered approach, participants gain the expertise to manage classrooms efficiently, design engaging lesson plans, and foster active student participation.

At the core of this training are Expected Learning Outcomes (ELOs) and Student Learning Outcomes (SLOs), ensuring that instructional goals are specific, measurable, achievable, realistic, and time-bound (SMART).

This program is deeply committed to gender and social inclusiveness, incorporating gender-sensitive instructional strategies to foster equitable learning spaces. It also places special emphasis on increasing female participation, ensuring greater representation and empowerment.

To bridge the gap between traditional teaching and modern, technology-driven learning, the training incorporates Information and Communication Technology (ICT) tools to enhance instructional delivery and engagement.

This manual champions a conceptual learning approach, incorporating stories, games, simulations, and higher-order thinking skills aligned with latest edition of the Bloom's Taxonomy. This shift encourages teachers to cultivate critical thinking and problem-solving abilities rather than relying on rote memorization.

Recognizing the interconnectedness of Early Childhood Care and Education (ECCE) and Foundational Learning (FL) policy, this manual provides specialized pedagogical strategies tailored for both monograde and multi-grade classrooms. It offers structured lesson plans, classroom management techniques, student assessment strategies, and time management frameworks to meet the unique demands of different teaching environments.

By embracing active learning methodologies, this training manual sets the stage for a transformative educational experience, equipping teachers with the skills to inspire, engage, and uplift future generations of learners. With this guide, educators will not only shape young minds but also ignite a lifelong passion for learning.

2. Introduction & Background

As defined in the provincial ECCE&FL Policy, Foundational Learning is the basis on which individuals build their knowledge, skills, and competencies. This includes an approach that takes basic literacy, as well as more general numeracy and social-emotional skills, which lay the foundation for academic success, critical thinking, and lifelong learning. Foundational learning is essential for building the knowledge, skills, and competencies that underpin academic success, critical thinking, and problem solving. The policy prioritizes the enhancement of fundamental reading, numeracy, and social-emotional competencies. Proficiency in literacy abilities, including the ability to recognize and manipulate individual sounds in words, acquire new words, and employ strategies to understand and interpret text, is essential for effective communication and the acquisition of knowledge. Being proficient in numeracy encompasses the abilities to count, perform mathematical operations, and engage in spatial reasoning, is essential for navigating daily existence. Developing social-emotional abilities, including self-awareness, social awareness, self- management, relationship skills, and responsible decision-making, is crucial for effectively regulating emotions and fostering positive interpersonal connections. A variety of teaching methods, such as play-based executive functioning supported with cooperative learning structures leading to inquiry-based learning, as well as inclusive learning spaces and continued formal and informal assessments help to develop children's fundamental abilities.

The Reform Support Unit (RSU), School Education & Literacy Department, Government of Sindh, aims to pilot the implementation of the ECCE&FL Policy for early graders (Early Childhood Care & Education to Grade 3) in the ASPIRE target districts through comprehensive stakeholder consultation and participation. The aim is to improve educational outcomes by promoting proficient reading, numeracy, and social-emotional abilities, therefore, facilitating to foster academic achievement, higher education, employment prospects and overall contribution in the society. The strengthened collaboration between the education systems, school management committees, families and communities, combined for a favorable school atmosphere, facilitates the overall learning and welfare of students, leading to improved academic and socio-emotional performance in the early grades.

3. Training Methodology

Designed with a learner-centered philosophy, this manual integrates activity-based, hands-on training methodologies, ensuring that teachers acquire practical, classroom-ready skills. By engaging in experiential learning, trainees will master the classroom management techniques, lesson planning, and interactive instructional strategies that inspire active student participation.

At the heart of this training are well-defined Expected Learning Outcomes (ELOs) and Student Learning Outcomes (SLOs), ensuring that instructional objectives are Specific, Measurable, Achievable, Realistic, and Time-bound (SMART).

Furthermore, this program champions gender and social inclusiveness, embedding gender-sensitive instructional strategies to cultivate equitable learning spaces. A strong emphasis is placed on increasing female participation, fostering representation, and empowering women teachers to become leaders in their field.

To bridge the gap between traditional and modern teaching methodologies, this training integrates Information and Communication Technology (ICT) tools, enhancing instructional delivery and engagement. This manual also adopts a conceptual learning approach, utilizing stories, games, simulations, and higher-order thinking skills based on Bloom's Taxonomy. This paradigm shift moves teachers beyond rote memorization toward cultivating critical thinking and problem-solving abilities in students.

Recognizing the intricate relationship between Early Childhood Care and Education (ECCE) and Foundational Learning (FL) policy, this manual provides specialized pedagogical strategies suited for both monograde and multi-grade classrooms. It offers structured lesson plans, classroom management frameworks, student assessment techniques, and time management tools tailored to diverse teaching environments.

4. Objectives of the Manual

By the end of this training, teachers will be able to:

1. Discuss the historical evolution of Early Childhood Care and Education (ECCE) and Foundational Literacy (FL) policy of the Sindh province demonstrating a clear understanding of educational policy developments from 1947 to 2024.
2. Define key concepts of Foundational Literacy, Numeracy and Socio-Emotional Learning and practice them effectively for teaching early graders.
3. Apply the 'Nurturing and Care Framework' to plan and manage Foundational Learning in classrooms with improved instructional strategies.
4. Implement Socio-Emotional Learning by using CASEL Model and Cooperative Learning Structures) techniques to support children's behavioral development and enhance the teaching-learning process.
5. Analyze the relationship between child development, growth, and foundational learning, integrating developmental principles into classroom practices.
6. Identify and utilize grade-wise Expected Learning Outcomes (ELOs) and/or Student Learning Outcomes (SLOs) for ECCE and Grades 1 to 3 to align classroom instruction with curriculum standards.
7. Demonstrate their grasp on incorporating early literacy, numeracy and social skills in lesson planning and material development exercises tailored for both monograde and multi-grade classrooms incorporating best practices in foundational learning.
8. Integrate Information and Communication Technology (ICT) tools into foundational learning lessons to enhance student engagement and learning outcomes.
9. Demonstrate an improved understanding of formative assessment and use of its tools e.g. Observation Checklist, Portfolio Development.
10. Create an inclusive learning environment by applying gender-sensitive and socially inclusive teaching practices.
11. Adopt active learning and student-centered approaches to make foundational learning more engaging and effective.
12. Enhance teaching skills by planning and delivering micro-teaching lessons and practicing effective instructional strategies and peer feedback techniques pertaining to foundational learning.

5. Ground Rules/Norms of the Training

Trainee teachers and master trainers are expected to develop the training norms or ground rules at the start of the event so that the program achieves its goals and objectives in a smooth and collaborative manner. The MTs will facilitate development of these ground rules/norms by engaging each/maximum participants/attendees, to be displayed on a chart in the training venue throughout the course of 12-days training.

We Will:

- respect others' ideas and experiences and continue to perform these actions.
- demonstrate the respect for the differences by avoiding stereotypes in our language and actions.
- observe regularity and punctuality.
- listen attentively to others.
- encourage others to participate.
- appreciate innovative ideas of all.
- reasonably dress up as per our context and culture.
- utilize material carefully.
- share and fulfil our roles and responsibilities to timely complete the tasks.
- take our turn, raise hand for making a prompt to the MT who will provide chance to speak.
- put off our mobiles or put on silent mode till the time for breaks.
- avoid unnecessarily going out of the classroom.
- avoid gossiping, unnecessarily prompting each other etc.

6. Training Agenda

Day 1: Welcome to the Training & Orientation to Foundational Learning Policy			
Activity #	**Time**	**Activity**	**Responsibility**
1.1	9:00-9:20 AM	Registration & Recitation from the Holy Quran	Master Trainer
1.2	9:20-9:30 AM	Inauguration ceremony, welcoming the participants	Master Trainer and Participants
1.3	9:30-10:00 AM	Introduction of Participants and Master Trainer (Bingo activity)	Master Trainer
1.4	10:00-10:30 AM	Administration of Pre-test	Master Trainer
1.5	10:30-11:00 AM	Expectations & Norms Setting	Master Trainer & Participants
	11:00-11:30 AM	**Tea Break**	
1.6	11:30-12:10	Introduction to ECCE & Foundational Learning Policy	Master Trainer
1.7	12:10-1:00	Early Child Brain Development	Master Trainer
	1:00-2:00 PM	**Lunch & Prayers**	
1.8	2:00-2:30 PM	Serve & Return (Early Child Brain Development)	Master Trainer
1.9	2:30-3:40 PM	Child Growth & Development & Role of Care Givers/ECE & Primary Teachers	Master Trainer
1.10	3:40-4:00 PM	Recap of the Day	Participants
		Working Tea and Closing	

Day 2: Child Nurturing & Care Framework & CASEL Model			
Activity #	**Time**	**Activity**	**Responsibility**
2.1	9:00-9:20 AM	Recitation from the Holy Quran & Reflection	Volunteer
2.2	9:20-10:00 AM	Child Nurturing & Care Framework	Master Trainer
2.3	10:00-11.00 AM	Socio-emotional Learning (CASEL Model)	Master Trainer
	11:00-11.30 AM	**Tea Break**	

2.4	11:30-1.00	Monograde & Multi-grade Classroom (Classroom Management)	Master Trainer
	1:00-2:00 PM	**Lunch and Prayer Break**	
2.5	2:00-2.40 PM	Monograde & Multi-grade Classroom Timetable	Master Trainer
2.6	2:40-3:50 PM	Monograde & Multi-grade Lesson Planning by Referring to ELOs/SLOs Analytical Grid	Master Trainer
2.7	3:50-4.00 PM	Recap of the Day	Participants
		Working Tea and Closing	

Day 3: Learning Domains, Assessment & its Tools for ECCE to Grade 03			
Activity #	**Time**	**Activity**	**Responsibility**
3.1	9:00-9.20 AM	Recitation From the Holy Quran & Reflection on Day 2	A Volunteer
3.2	9:20-10.20 AM	Introduction of the Domains of Bloom's Taxonomy	Master Trainer
3.3	10.20-11.00 AM	Assessment & Its Types	Master Trainer
	11.00 AM	**Tea Break**	
3.4	11.00-12:00 AM	Principles for Foundational Literacy and Numeracy Assessment	Master Trainer
3.5	12.00-1.00 PM	Formative Assessment Tools for Foundational Literacy, Numeracy and Socio-emotional Skills – Observation Checklist, Portfolio Development	Master Trainer
	1.00-2.00 PM	**Lunch and Prayers**	
3.6	2:00-3.45 PM	Development of Assessment Tasks for Foundational Literacy, Numeracy and Socio-emotional Skills	Master Trainer
3.7	3.45-4.00 PM	Recap of the day	Participants
		Tea and Closing	

Day 4: An Orientation to Foundational Learning Kit and Foundational Literacy Skill Development (Listening & Speaking)			
Activity #	**Time**	**Activity**	**Responsibility**
4.1	9:00-9.20 AM	Recitation from the Holy Quran & Reflection on Day 3	A Volunteer

4.2	9:20-10.00 AM	Orientation of Foundational Learning Material Kit	Master Trainer
4.3	10:00-11:00 AM	Introduction to Foundational Literacy (Listening & Speaking) Skills Development for Foundational Literacy	Master Trainer
	11:00-11:30 AM	**Tea Break**	
4.4	11:30-12.20 PM	Teaching Learning Strategies for Listening & Speaking Skills Development (ECCE & Grade-1) Supported with Socio-Emotional Skills	Master Trainer
4.5	12:20-1.00 PM	Teaching Learning Strategies for Listening & Speaking Skills Development (Grade 2 & 3) Supported with Socio-Emotional Skills	Master Trainer
	1:00-2.00 PM	**Lunch & Prayer**	
4.6	2.00-3.00 PM	Activity Designing: Development of Foundational Listening & Speaking Activities Supported with Socio-Emotional Skills in Monograde & Multi-grade Classroom Situations	Participants
4.7	3:00-3.45 PM	Group Presentation: Sharing or performing the designed activities	Participants
4.8	3.45-4.00 PM	Recap of the day	Master Trainer & Participants
		Working Tea and closing	

Day 5: Foundational Literacy Skill Development (Reading)			
Activity #	**Time**	**Activity**	**Responsibility**
5.1	9:00-9.20 AM	Recitation from the Holy Quran & Reflection on Day 4	A Volunteer
5.2	9:20-10.00 AM	Foundational Reading Skill (Literacy) and its Components	Master Trainer
5.3	10:00-11:00 AM	Essential Foundational Reading Skills for ECCE to Grade 1 – 3	Master Trainer
	11:00 AM	**Tea Break**	
5.4	11:30-12.20 PM	Types of Reading Strategies in The Classroom Supported with Socio-Emotional Skills	Master Trainer
5.5	12:20-1.00 PM	Ways to Improve Reading Skills Supported with Socio-Emotional Development	Master Trainer
	1:00-2.00 PM	**Lunch & Prayer**	

5.6	2.00-3.00 PM	Activity Designing: Development of Foundational Reading Activities Supported with Socio-Emotional Skills in Monograde & Multi-grade Classroom Situations	Participants
5.7	3:00-3.45 PM	Group Presentation: Sharing or performing the design activities	Participants
5.8	3.45-4.00 PM	Recap of the day	Master Trainer & Participants
		Working Tea and closing	

Day 6: Foundational Literacy Skill Development (Writing)			
Activity #	**Time**	**Activity**	**Responsibility**
6.1	9:00-9.20 AM	Recitation from the Holy Quran & Reflection on Day 4	A Volunteer
6.2	9:20-10.00 AM	Foundational Writing Skill (Literacy)	Master Trainer
6.3	10:00-11:00 AM	Writing Skill Development for Foundational Literacy	Master Trainer
	11:00 AM	**Tea Break**	
6.4	11:30-12.20 PM	Teaching Learning Strategies for Writing Skill Development (ECCE & Grade-1) Supported with Socio-Emotional Skills	Master Trainer
6.5	12:20-1.00 PM	Teaching Learning Strategies for Writing Skill Development (Grade2- Grade 3) Supported with Socio-Emotional Skills	Master Trainer
	1:00-2.00 PM	**Lunch & Prayer**	
6.6	2.00-3.00 PM	Activity Designing: Development of Foundational Writing Activities Supported with Socio-Emotional Skills in Monograde & Multi-grade Classroom Situations	Participants
6.7	3:00-3.45 PM	Group Presentation: Sharing or Performing the designed activities	Participants
6.8	3.45-4.00 PM	Recap of the day	Master Trainer & Participants
		Working Tea and closing	

Day 7: No Cost /Low-Cost Material Development & Micro Teaching Practices for Teachers in Foundational Literacy			
Activity #	**Time**	**Activity**	**Responsibility**
7.1	9:00-9.20 AM	Recitation from the Holy Quran & Reflection on Day 6	A Volunteer
7.2	9:20-10.00 AM	Teaching A/V aids: Importance of Teaching Aids in Foundational Literacy	Master Trainer
7.3	10:00-11:00 AM	No cost /Low cost Material Development for Teaching Foundational Literacy	Master Trainer
	11:00 AM	**Tea Break**	
7.4	11:30-12.20 PM	An Introduction to Micro-Teaching for Teachers (Planning & Demonstrations)	Master Trainer
7.5	12:20-1.00 PM	Developing Micro-Teaching Lesson Plans for Teachers supported with Socio-Emotional Skills in Monograde & Multi-grade Classroom Situations	Master Trainer
	1:00-2.00 PM	**Lunch & Prayer**	
7.6	2.00-3.45 PM	Presentation of Micro-Teaching Lesson Plans	Participants
7.7	3.45-4.00 PM	Recap of the day	Master Trainer & Participants
		Working Tea and closing	

Day 8: Foundational Numeracy Skill Development for ECCE to Grade 1-3			
Activity #	**Time**	**Activity**	**Responsibility**
8.1	9:00-9.20 AM	Recitation from Holy Quran & Reflection on Day 7	A Volunteer
8.2	9:20-10.00 AM	An Introduction to Foundational Numeracy Skills at early grades and its Importance to develop a positive attitude towards learning mathematics	Master Trainer
8.3	10:00-11:00 AM	Understanding of Concept 'Numbers & Numbers Operation' at ECE to Grade 1 – 3	Master Trainer
	11:00 AM	**Tea Break**	
8.4	11:30-12.20 PM	Teaching Learning Strategies for Foundational Numeracy (Basic mathematical Concepts) at ECE level, Number Sense: Recognition, Counting, Number Sense, Read & Write Numbers	Master Trainer

8.5	12:20-1.00 PM	Teaching Learning Strategies for Foundational Numeracy for Grade 1 – 3 Number Operation: Recognizing/creating sequence: Numbers, Patterns, Objects, shapes, Read & Write	Master Trainer
	1:00-2.00 PM	**Lunch & Prayer**	
8.6	2.00-3.00 PM	Activity Designing: Development of Numbers & Number Operation Activities for ECCE to Grade 1-3 Supported with Socio-Emotional Skills	Participants
8.7	3:00-3.45 PM	Presentation: Sharing or performing the designed activities	Participants
8.8	3.45-4.00 PM	Recap of the day	Master Trainer & Participants
		Working Tea and closing	

Day 9: Foundational Numeracy Skill Development (Addition, Subtraction, Multiplication & Division)			
Activity #	**Time**	**Activity**	**Responsibility**
9.1	9:00-9.20 AM	Recitation from Holy Quran & Reflection on Day 8	A Volunteer
9.2	9:20-10.00 AM	Understanding the concept of Addition and Subtraction (Numeracy) at ECCE to Grade 1-3	Master Trainer
9.3	10:00-11:00 AM	Introductory concepts, Multiplication & Division: two or three-digit numbers for Grade 2 & 3	Master Trainer
	11:00 AM	**Tea Break**	
9.4	11:30-12.20 PM	Learning Foundational Numeracy Through Fun: Addition/Subtraction/ Multiplication and Division	Master Trainer
9.5	12:20-1.00 PM	Teaching and Learning Strategies of Foundational Numeracy (Addition, Subtraction, Multiplication and Division) in Monograde & Multi-grade Classroom through hands on Activities	Master Trainer
	1:00-2.00 PM	**Lunch & Prayer**	

9.6	2.00-3.00 PM	Activity Designing: Development of Activities (Addition, Subtraction, Multiplication and Division) for ECCE to Grade 1 – 3 Supported with Socio-Emotional Skills in Monograde & Multi-grade Classroom Situations	Participants
9.7	3:00-3.45 PM	Presentation: Sharing or performing the designed activities	Participants
9.8	3.45-4.00 PM	Recap of the day	Master Trainer & Participants
		Working Tea and closing	

Day 10: Foundational Numeracy Skill Development (Place Value, Time & Money)			
Activity #	**Time**	**Activity**	**Responsibility**
10.1	9:00-9.20 AM	Recitation from Holy Quran & Reflection on Day 9	A Volunteer
10.2	9:20-10.00 AM	Understanding the concept of Place Value: (units and tens) for Grade 1 & 2 and Understanding hundreds for Grade 3	Master Trainer
10.3	10:00-11:00 AM	Time: Telling time & Reading to nearest minute, Money: counting money (Shopping & Finance) Supported with Socio-Emotional Skills	Master Trainer
	11:00 AM	**Tea Break**	
10.4	11:30-12.20 PM	Foundational Numeracy Through Play; Its Purpose and Importance	Master Trainer
10.5	12:20-1.00 PM	Teaching and Learning Strategies of Foundational Numeracy: 'Place Value, Time and Money' in Monograde & Multi-grade Classrooms through Play Based Strategies	Master Trainer
	1:00-2.00 PM	**Lunch & Prayer**	
10.6	2.00-3.00 PM	Activity Designing: Group Task Development of Activities (Addition, Subtraction, Multiplication and Division) around Time & Money for ECCE to Grade 1 – 3 Supported with Socio-Emotional Skills in Monograde & Multi-grade Classroom Situations	Participants

10.7	3:00-3.45 PM	Demonstration: Performing the designed activities	Participants
10.8	3.45-4.00 PM	Recap of the day	Master Trainer & Participants
		Working Tea and closing	

Day 11: Foundational Numeracy Skill Development (Fraction, Basic Shapes & Measurement)			
Activity #	**Time**	**Activity**	**Responsibility**
11.1	9:00-9.20 AM	Recitation from Holy Quran & Reflection on Day 10	A Volunteer
11.2	9:20-10.00 AM	Concepts of Fraction: • Understanding basics (1/2, 1/4) Word Problems • Understanding of simple math stories	Master Trainer
11.3	10:00-11:00 AM	Basic Shapes: • Identifying shapes (circle, square, triangle) Measurement: • Concepts like "big," "small," and "full" • Comparing lengths and weights	Master Trainer
	11:00 AM	**Tea Break**	
11.4	11:30-12.20 PM	Understanding Measurement: • Standard units • Non-standard unit	Master Trainer
11.5	12:20-1.00 PM	Teaching and Learning Strategies of Foundational Numeracy: 'Fraction, Word Problem' Shapes and Measurement' in Monograde & Multi-grade Classroom through Fun, Play and Concrete Experiences	Master Trainer
	1:00-2.00 PM	**Lunch & Prayer**	
11.6	2.00-3.00 PM	Activity Designing: Group Task Development of Numeracy Activities (Fraction, Word Problem' Shapes and Measurement) for ECCE to Grade 1 – 3 Supported with Socio-Emotional Skills in Monograde & Multi-grade Classroom Situations	Participants

11.7	3:00-3.45 PM	Demonstration: Performing the designed activities	Participants
11.8	3.45-4.00 PM	Recap of the day	Master Trainer & Participants
		Working Tea and closing	

Day 12: Action Planning for Foundational Learning			
Activity #	**Time**	**Activity**	**Responsibility**
12.1	09:00-09:20 AM	Recitation from the Holy Quran & Reflection on Day 11	Volunteer
12.2	09:20-10:00 AM	Exploring Action Planning	Teacher Training Team
12.3	10:00-11:00 AM	Foundational Learning in Classrooms - Action Planning for the Field	Teacher Training Team
	11:00 AM	**Tea Break**	
12.4	11:30-01:00 PM	Gallery Walk - Display of Action Plans, Portfolios, Lesson Plans and Low Cost No Cost Materials developed by the Participants and Feedback	Teacher Training Team
	1:00 PM	**Lunch & Prayer**	
12.5	02:00-04:00 PM	Gallery Walk - Continued Closing of the 12 days Teacher Training	Teacher Training Team
		Working Tea and closing	

7. Section-I Generic Topics

DAY-1

Handout # 1.3: Bingo Activity - Introduction of Participants & Facilitators

INSTRUCTION

Introduce yourself to as many colleagues as possible. Complete the bingo sheet, pick the smiley face from the front table and paste on the board. Then shout with the slogan BINGO!

The moment when you love yourself ?	**Make a list of three things when you feel worried.**	**No one is playing with you what do you do?**
You need an adult's help who can you ask.	**List three things you love about yourself.**	**Practice a breathing exercise and write DONE!**
Write about a place that makes you feel happy.	**Jump two times and write DONE!**	**What is one thing that is a grateful for you?**

Handout # 1.6: Introduction to ECCE & Foundational Learning Policy 2024

INSTRUCTION

Work in groups and prepare group presentation and present in front of whole class.

- **Group 1**: Introduction of ECCE &Foundational Learning Policy 2024
- **Group 2:** ECCE &FL Policy Evolution 1-6)
- **Group 3:** &FL Policy Evolution (7-12)
- **Group 4:** Definitions
- **Group 5:** Foundational Literacy & Numeracy Benchmarks

INTRODUCTION

The Early Childhood Care, Education and Foundational Learning (ECCE&FL Policy) 2024 is an integrated framework initiated by the School Education and Literacy Department (SE&LD), Government of Sindh, to prioritize the holistic development of children in early years from ECE class to Grade 3.

The ECCE 2015 policy has so far remained standalone, with a recommendation outlined in the same policy to review and update it after three years. As part of its evolution, the policy is now being revised to integrate Foundational Learning (FL), making it more comprehensive and aligned with current educational priorities

ECCE and FL POLICY EVOLUTION

1. The inception of Early Childhood Education (ECE) within Pakistan's education sector can be traced back to the inaugural Education Conference conducted in November 1947. The terms of reference for the primary and secondary education committee encompassed a provision for preprimary education, with the committee advising that the Central and Provincial Governments collaborate to create nursery schools (TEC, 1947). The age range for early childhood education was established as 3 to 6 years in the 1947 proceedings.
2. In 2000, Pakistan ratified the Millennium Declaration, committing to 16 targets and 41 indicators to advance towards the attainment of the Millennium Development Goals (MDGs) by 2015. Pakistan also adopted the Dakar Framework for Action, pledging to fulfil the educational requirements of children, youth, and adults by 2015 through the Education for All (EFA) objectives.
3. In 2001, the Education Sector Reforms Action Plan (2001-2005) identified Early Childhood Education (ECE) as an innovative initiative in public schools throughout Pakistan. The National Plan of Action (NPA) and Education for All (EFA) goals (2002-2015) aimed to achieve 50% enrolment in ECE within formal schools. However, limited resources prevented full realization of this target.
4. The National Education Policy (NEP) 2009 was a significant milestone, officially acknowledging Early Childhood Education (ECE) as a pre-primary sub-sector and categorizing it under the word “Katchi,” which pertains to children aged 3-5 years.

5. The 18th Constitutional Amendment (2010) devolved educational responsibility to the provinces; Right to Education Acts (RTA) were passed in Islamabad Capital Territory, Sindh, Balochistan, Punjab, and Khyber Pakhtunkhwa provinces (2012-2017) mandating free and compulsory education for children aged 5-16 under Article 25A, including early childhood provisions.
6. The Sindh Education Sector Plan (2014-18) subsequently included targeted measures to improve access to early childhood care and education (ECCE) services. Supported by the Global Partnership for Education (GPE), the efforts integrated ECCE within Sindh's sector-wide strategies.
7. The formulation of the ECCE Policy 2015 under SESP 2014-18 involved an extensive examination of local and international early childhood initiatives, with the objective of synchronizing Early Childhood Education, and educational services with the EFA and MDGs .
8. The SESP reforms also introduced a new cadre for ECE teachers in 2017 as a component of its recruiting program, establishment of an ECCE Curriculum (2017), ECCE Standards (2019), and ECCE Teachers' Guides (2020) to ensure that children acquire core abilities and skills prior to commencing primary education.
9. The Sustainable Development Goals (SDGs) reaffirmed the commitment to egalitarian education from 2016 through 2030. Pakistan's commitment to advancing and institutionalizing early childhood education to achieve SDG4 and SDG 4.2 targets is reaffirmed in the National Education Policy Framework 2018.
10. The SESP&R 2019–24 builds on earlier policies by integrating early childhood care and education (ECCE) with Foundational Learning (FL), with an emphasis on improving literacy and numeracy governance, quality, and accessibility in Sindh's educational system. As part of the implementation of ECCE Policy 2015, SESP&R 2019–24 strategically upgrades early childhood and pre-primary education facilities through its Priority Program, in line with National Education Policy Framework 2018, to ensure foundational learning outcomes from early childhood onward.
11. As Pakistan, particularly Sindh, moves further into the 21st century, its educational policies continue to evolve to meet the rapidly changing needs. Achieving the SDG 4's commitment to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” and the SDG 4.2 “ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education” requires a more streamlined, cohesive approach to early childhood education connecting ECCE programs with the cultivation of foundational learning competencies, including fundamental literacy, writing, numeracy and social emotional development.

12. This ECCE&FL integrated policy aligns with national and global objectives, specifically the Sustainable Development Goals (SDGs), and emphasizes the provision of inclusive, equitable, and comprehensive educational experiences from an early age to nurture lifelong learning.

DEFINITIONS

Early Childhood Care and Education (ECCE)

a) Early Childhood Care and Education (ECCE) is a comprehensive approach focused on the critical developmental period from birth to age eight and emphasizes the essential principles and practices that support young children's cognitive, physical, social, and emotional growth.

b) As defined in UNESCO 2023, "ECCE is more than preparation for primary school. It aims at the holistic development of a child's social, emotional, cognitive, and physical needs in order to build a solid and broad foundation for lifelong learning and wellbeing".

Foundational Learning (FL)

a) Foundational learning is defined as basic literacy, numeracy, and transferable skills such as socio-emotional skills that provide the fundamental building blocks for all other learning, knowledge, and higher-order skills (Global Coalition for Foundational Learning 2022).

Both foundational literacy and numeracy are essential for personal, academic, and professional success and include achieving some basic competencies that are critical for achieving later outcomes. It is important to understand these concepts explicitly:

Literacy

a) Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society (UNESCO, Institute for Statistics).

b) Literacy includes the capacity to read, understand and critically appreciate various forms of communication including spoken language, printed text, broadcast media, and digital media (Dublin: Department of Education and Skills [DES] 2011, p.8).

Numeracy

a) Numeracy encompasses the ability to use mathematical understanding and skills to solve problems and meet the demands of day-to-day living in complex social settings. To have this ability, a young person needs to be able to think and communicate quantitatively, to make sense of data, to have a spatial awareness, to understand

patterns and sequences, and to recognize situations where mathematical reasoning can be applied to solve problems. (Dublin: Department of Education and Skills [DES] 2011, p.8)

b) The concept of numeracy has been broadened to increase competencies such as ability to communicate, interpret, employ and evaluate mathematical information in situations related to social and world life, education and reflection citizenship (Nortvedt & Wiese, 2020).

FOUNDATIONAL LITERACY AND NUMERACY COMPETENCY BENCHMARKS FROM ECCE TO GRADE 3

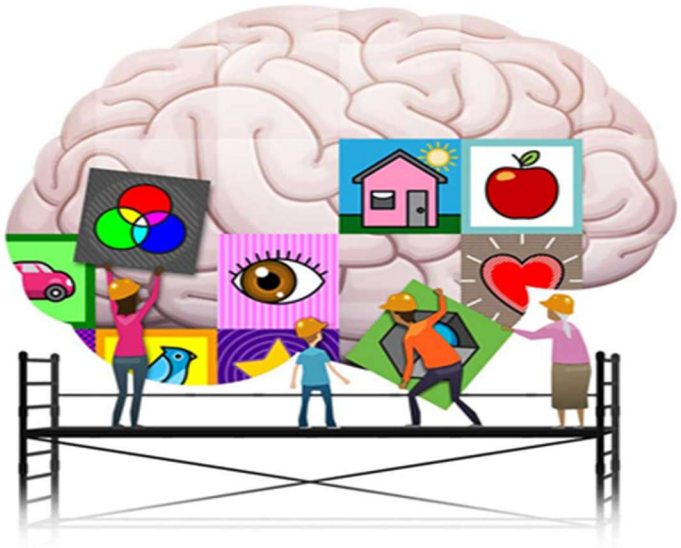
Stage	Foundational literacy skills	Foundational Numeracy Skills
Early childhood & care education (year 1)	• Phonemic Awareness: Recognizing • rhymes and beginning sounds. • Alphabet Knowledge: Recognizing letters and sounds. • Basic Vocabulary: Learning words through stories and conversation. • Print Awareness: Understanding print's meaning and reading lines	• Number Recognition: Recognizing numbers (up to 10). • Counting: Objects and one-to-one correspondence. • Basic Shapes: Identifying shapes (circle, square, triangle). • Measurement: Concepts like big, small and full
Early childhood & care education (year 2)	Letter-Sound Correspondence: Matching letters to sounds. □ Word Recognition: Recognizing common words (e.g., "the"). □ Simple Reading: Read simple words of 2 to 3 letters. □ Writing: Simple words/phrases, □ Phonics: Fluently decoding word	• Counting & Number Sense: Up to 20. • Recognizing/creating sequence: Numbers/Patterns/Objects/shapes: (e.g., ABAB). • Measurement: Comparing lengths/weights.
Grade 1	• Phonics: Fluently decoding words. • Reading: read small sentences of 4 to 5 simple words with basic	• Read and Write: Numbers up to 99 • Addition/Subtraction: Single digit (within 10). • Place Value: Understanding place value (units and tens).

	comprehension. • Writing: Simple sentences (at least 3 to 4 words). • Comprehension: Identifying main story elements.	• Measurement: Non-standard units (e.g., blocks). • Word Problems: Understand simple math stories.
Grade 2	• Reading Fluency: More fluency with short stories. • Vocabulary Expansion: Learning complex words (4 to 5 letter words). • Writing: Simple 3 to 4 sentences paragraphs. • Comprehension: Detailed text analysis(setting plot)	• Read and Write: Numbers up to 999 • Addition/Subtraction: Two-digit numbers. • Multiplication/Division: Introductory concepts. • Place Value: Understanding hundreds. Time: Telling time.
Grade 3	• Reading Comprehension: Longer texts, identifying details. • Writing: Multi-paragraph texts. • Fluency: Expressive reading. • Vocabulary: Context-based word meanings. • Vocabulary: Context-based word meanings.	• Multiplication/Division: three-digit numbers. • Fractions: Understanding basics (1/2, 1/4). • Measurement: Standard/non standard units. • Time & Money: Reading to nearest minute, counting money.

Handout # 1.7: Early Brain Development

INSTRUCTION

Brainstorm the participants with the help of Picture. Work in groups and prepared Flash Cards as presentations and display all Flash cards in form of Gallery in classroom.



Just like a house needs a strong foundation to support the walls and the roof, your child's brain needs a good base to support all future development. The most important time for your child's brain development is during pregnancy and the early years. This is when the foundation for future learning, behavior, and health is set.

Reference;

https://www.healthyparentshealthychildren.ca/im-a-parent/overview-ofparenting/factors-that-affect-child-development/#brain-development

What the Brain Does?

Your brain is located in your head. It is continued in and protected by the skull bones of the head.

Your brain is look like a walnut. It has many creases and folds. It feels squishy and soft.

The brain is amazing. It is the 'boss' of your body. It controls everything we do. For example, blinking eyes, listening, talking, reading writing, touching, smelling, sleeping, eating, feeling hungry, walking, lifting, hanging, holding, balancing, remembering, solving problems, making decision like what to wear, feeling emotions like being sad or happy and making friends.

An adult weight is about 1.4 kg (1400 grams) or 3 pounds. It is about the size of your two fists put together.

Importance of Early Brain Development/ Things to know about child's developing brain:

- The brain begins to develop every early in life.
- The basic brain architecture or structure begins to develop during the parental period, even before a baby born.
- A baby's brain development is 3 years old, her or his brain grows to about 80% of an adult size brain.
- By the time a baby is 5 years old her/his brain grows about 90% of adult brain.
- A new born baby has all the brain cells which she/he will the rest of her/his life.
- The brain has approximately 100 billion nerve cells which are about in the galaxy.
- Connections between these brain cells are needed for the brain to work.
- During the first few years of human life the brain grows very rapidly and many connections are made called synapsis.
- Early childhood is a very important time for making these connections for the brain to grow and develop. These connections are form through every day experiences like, feeding, dressing, playing and talking with babies and young children.
- The brain continues to develop throughout life, building on the foundation established in early childhood. This foundation is important for ongoing learning, the ability to cope with life challenges, for physical and mental health and for economic and social productivity.

Handout # 1.8: Serve and Return

INSTRUCTION

- **Sit in a circle and present a Role play of a child playing football with caregiver.**

- **Discuss it interactively. Read & discuss the given handout and case studies in groups and answer the following questions within groups .**

Q#1:Which Case Study you like most and Why?
Q#2:What is difference between both case studies?
Q#2: What are the differences of interventions and outcomes of both case study?

- **share their understanding with whole class interactively.**

The Role of Positive Relationships

A child's relationships with adults are the most important influences on their brain development. Loving relationships with responsive, dependable adults are essential to a child's healthy development. These relationships begin at home, with parents and family, and include child care providers, teachers and other community members.

Children thrive on "serve and return" interactions—when babies coo, cry or smile, and caregivers respond. This back-and-forth communication builds strong emotional bonds and forms the foundation for skills like motivation, self-regulation and communication.
While positive experiences drive healthy brain growth, adverse childhood experiences like poverty, exposure to violence and lack of access to quality early learning experiences can derail development. Toxic stress disrupts the brain's architecture, affecting a child's ability to learn and grow.
Children exposed to chronic stress are more likely to face challenges in school, relationships and health.
Supportive relationships and nurturing environments can buffer these effects, helping children build resilience.
Reference: https://www.firstthingsfirst.org/early-childhood-matters/brain-development

Case Study # 01

Baby Aisha, at 9 months old, babbles frequently, points at objects, and makes various sounds to get her caregiver's attention.Aisha's primary caregiver consistently engages in "serve and return" interactions. When Aisha babbles "ba-ba," the caregiver responds with "Yes, that's a ball! A round, bouncy ball!" When Aisha points at the family cat, the caregiver says, "Oh, you

see the kitty! The kitty says 'meow!'" They wait for Aisha's response (a smile, another sound, or continued pointing) and then respond again, keeping the interaction going.

By 18 months, Aisha has a significantly larger vocabulary compared to the average for her age. She actively participates in simple conversations, asks for things by name, and understands a wide range of instructions. Her consistent exposure to responsive language through serve and return interactions has fostered strong language development.

Case Study # 02

Baby Bilal at 10 months old, also makes sounds and gestures to interact. However, his primary caregiver is often pre occupied with other tasks and responds inconsistently or briefly to Bilal 's attempts to connect.Serve and return interactions are infrequent and often missed. When Bilal babbles, the caregiver might say "Uh-huh" without looking up. When he points, they might just say "Yes, that's it" and move on. There is little back-and-forth or elaboration on Bilal 's "serves." By 2 years old, Ben shows some delays in his social-emotional development. He is less expressive with his emotions, has difficulty engaging in reciprocal play with other children, and can become easily frustrated when his attempts to communicate are not acknowledged. The lack of consistent serve and return interactions has potentially impacted his ability to understand and express social cues and regulate his emotions.

Handout # 1.9.A: Child Growth & Development and Role of Caregivers

INSTRUCTION

1. Brainstorm the participants with the question & write their responses on the board.
2. Distribute the worksheet **handout 1.9A** among the participants and ask them to write the growth and development in the given boxes from ECCE to grade 3 with reference to given picture and written text.
3. Develop an activity to support Foundational learning.
4. Afterward distribute the **handout 1.9B** and ask participants to fill the handout according the given instructions, discuss and share interactively with the whole class.

At ECCE level	Grade-1
Grade-2	Grade-3

Age (3 to 4 Years)

Between the ages of three to 4 years, the following features develop:

- Children refine their motor skills. They can throw the ball, skip and hop, and dress.
- They are full of imagination and creativity.
- Start developing their concentration power.
- Their communication skills improve.
- They are able to use tricycles and wheeled toys.
- They are able to cooperate with other children and make friends.

School children are now fully developed and possess the following characteristics: -

- Respond to reasoning
- Recite nursery rhymes and enjoy singing
- Can dress, eat and wash their clothes independently
- Their hand-eye coordination and motor skills are developed
- They can use imaginative and creative play
- They like to initiate conversations with others.

Age (4 to 5 years)

School children are now fully developed and possess the following characteristics: -

- Respond to reasoning
- Recite nursery rhymes and enjoy singing
- Can dress, eat and wash their clothes independently
- Their hand-eye coordination and motor skills are developed
- They can use imaginative and creative play
- They like to initiate conversations with others.

Age (6 to 8 years)

Between ages 6 and 8, children experience significant development in their physical abilities, social skills, cognitive thinking, and emotional understanding, marked by a growing sense of independence, stronger friendships, improved fine motor skills, and a developing awareness of fairness and rules. this period is often referred to as "middle childhood.".

As your child continues to grow, you will notice new and exciting abilities that your child develops. While children may progress at different rates and have diverse interests, the following are some of the common milestones children may reach in this age group:

- Enjoy many activities and stays busy
- Like to paint and draw
- Practice skills in order to become better

- Jump rope, skip and chase
- Ride bikes
- Can tie shoelaces
- Can do simple math like adding and subtracting
- Dress and groom self completely
- Use tools (i.e., hammer, screwdriver)

Handout # 1.9.B: Child Growth & Development and Role of Caregivers

Instructions: What can Caregivers (Mother, Father, Teacher & other family members) do to Support Child Development & Growth for ECCE & Foundational Learning. Write your responses with the help of domain wise mile stones of Child Development.

Physical Fine/Grass Motor Development	Language Development	Cognitive Development	Social Development	Emotional Development

Domain-wise milestones of Child Development

	COGNITIVE	PHYSICAL	SOCIAL	EMOTIONAL	LANGUAGE
Infant: 0-6mos.	~Learn to recognize faces and voices of parents and providers ~turn to locate the source of sounds ~forget about objects that they cannot see ~explore things with their mouth	~Most of their movements are reflexes ~nervous system is not fully developed ~can see clearly objects that are about 10 inches away from their faces	Smiles when others smile at them Interested in goings on around them Intently watches	~begin to develop trust as their parents and providers meet their needs ~cry to express hunger, anger, and pain ~easily excited or upset ~need to be cradled and comforted	Responds to "Mother-ese" By cooing, imitation of mouth shapes, brightening
Infant/ Toddler 7-12 mos.	~respond when you say their names ~repeat actions that cause a response ~look for things not in sight (object permanence) **~respond to simple directions** ~Is aware that persons and things have labels ~Shows memory of recent events	~increasing control of their muscles and nervous system ~can sit alone ~By 8 months, they can reach for and hold objects,throw, hold with finger and thumb ~Transfers toys purposely hand to hand and mouth	**~begin to learn what is and is not allowed** ~begin to fear strangers ~begin to fear being left by their parents or other care providers. ~eye contact begins to replace some of the physical contact that younger infants seek ~wave bye-bye and play pat-a-cake	~get angry and frustrated when their needs are not met in a reasonable amt. Of time. ~begin to pretend by acting out familiar activities	~Two-syllable sounds(da-da) ~make sounds that can be understood by people who know them well ~12 months, many infants speak their first understandable words
Toddler 12 mos.-2yrs	~begin defining themselves as separate people ~ use objects for their intended purpose ~attention span is short ~developing imagination, have trouble knowing what is real and what is pretend	**~need to explore their environment** ~very active ~begin walking, other basic skills (begin to jump, gallop, throw a ball, etc.) ~Most walk without support by 14 months	~have difficulty sharing toys/possessive ~enjoy playing by themselves or beside (not with) other children **~cannot remember rules** ~view themselves as the center of the world ~Routines are very important ~begin to include a second person in pretend play	~long on will and short on skill ~want to be independent, but are still dependent ~ very concerned with their own needs and ideas ~Temper tantrums are common begin to express new emotions **rapid mood shifts/ emotions are usually very intense but short-lived** ~need to do things their way	~name familiar people and objects ~combine two words to form a basic sentence ~use "no" frequently ~understand what you say, but often cannot answer you
***2yrs** ***ages approx.**	~like to imitate the behavior of adults and others ~begin to think about doing something before doing it ~have trouble making choices, but they want to make choices ~still have a very limited attention span shows mind set: certain things in certain orders ~understands a two-step request	~are generally more active than at any other point in their lives ~walk, run, climb, walk up and down stairs alone ~jump with two feet together, stand on tip toes ~start to show an interest in toilet training ~have a hard time controlling themselves in physical activities, especially running, i.e.~cannot always remember the "rules", but understand them	~begin to play simple pretend games ~generally very self-centered and sharing is still difficult ~enjoy playing near other children. assert themselves by saying "no." ~sometimes do the opposite of what is asked	become frustrated easily, refuse help, ~still need security ~more sure of themselves than one-year-old children ~temper tantrums are common, especially in children without language development ~begin self-control ~separation anxiety lessens:can retain a picture of persons when they are out of sight.	~express their feelings and wishes ~begin to talk in full sentences ~can memorize short rhymes

DAY-2

Handout # 2.2: Nurturing Care Framework

INSTRUCTION

1 Think, pair & share about the topic Nurturing Care Framework. Develop their framework,
2 Work in groups on given handout 2.2 and align their developed frame work with the given frame work.
   - **Group 1:** Good Health
   - **Group 2:** Adequate Nutrition
   - **Group 3:** Responsive Care Giving
   - **Group 4:** Safety & Security
   - **Group 5:**Opportunities for early Learning
3 Develop an activity to support students on assigned group topic for your classroom to support students.

Nurturing Care Framework

A framework for helping children to SURVIVE & THRIVE to Transform health and human potential

The Nurturing Care Framework for Early Childhood Development was launched alongside the World Health Assembly in 2018. On this page you will find the full report, executive summaries, as well as a range of additional materials to facilitate dissemination and implementation of the Framework.

Nurturing care in education focuses on a child's emotional and developmental needs, as well as their academic learning. It's based on the idea that children develop best when they feel safe, secure, and supported.

The five components of nurturing care:

1. Good health

For good health, young children need caregivers to:

- monitor how they are, physically and emotionally
- respond affectionately and well to their daily needs
- protect them from danger at home and outside
- be hygienic and minimize infections
- use health services, both promotional and preventive
- get the right treatment when they are ill.

2. Adequate nutrition

Pregnant women's nutrition affects their babies' development, as well as their own well-being. From birth to six months old, babies flourish on exclusive breastfeeding. After that, they need complementary foods, diverse and often, containing the micro nutrients to support their rapidly growing bodies and brains.

3. Security and safety

The biggest risks to children are extreme poverty, low income, air pollution, chemicals, unsafe play environments, harsh punishment and violence. Social and child protection services are critical, securing financial and other support for the most vulnerable households. Other services and community networks also help to prevent and detect maltreatment, and create safe communities.

4. Opportunities for early learning

Learning begins at conception, and as soon as babies are born they begin to acquire skills socially, from other people – through smiling and eye contact, talking and singing, modeling and imitation, and simple games like "wave bye-bye". Playing with everyday things like cups and pots helps children learn about objects and what to do with them. And reading books allows children to name things, as well as building curiosity, imagination and knowledge.

5. Responsive care giving

Responsive care giving means observing and responding to children's movements, gestures, sounds and verbal requests. This protects children against injury and adversity, enables caregivers to recognize and respond to their needs, enriches learning, and builds trust and social relationships. It also includes responsive feeding, which is especially important for infants who are low-weight or ill.

For more information and examples see:
Nurturing Care Framework for Early Childhood Development (pp. 12-19)
What is nurturing care at www.nurturing-care.org
Extract from the Nurturing Care Framework Handbook (in preparation).

How nurturing care is implemented?

- **Creating a supportive environment**: Schools that nurture children create a balance between challenge and care, with high expectations and a focus on achievement.
- **Providing responsive care**: Teachers and other caregivers are fully present, validate children's feelings, and provide physical comfort when needed.
- **Providing opportunities for learning**: Children are offered a variety of playful learning experiences.

Benefits of nurturing care

- Nurturing care helps children develop to their full potential.
- It helps children survive and thrive.
- It helps children develop physically, socially, emotionally, and cognitively.
- Nurturing care components good health, adequate nutrition, safety and security, responsive care-giving, and opportunities for early learning.

Nurturing Care Framework WHO - https://www.who.int/teams/maternal-newborn-child-adolescenthealth-and-ageing/child-health/nurturing-care

Handout # 2.3.A: Social-Emotional Intelligence

INSTRUCTION

1. Distribute the balloons among the all participants and ask them to blow and draw anything on their balloons and through it in the air upward direction. Every one try to save their nearest balloon to drop down, continue this activity for some while. After ending activity share your feelings during activity with whole class.
2. Fill the handout 2.3A individually and share randomly with whole class.

3. Work in groups ,Read and discuss the handout 2.3B within groups and develop an activity to support children of ECCE to Grade 3 in Socio- Emotional Learning with the help of following link https://www.prodigygame.com/main-en/blog/social-emotional-learning-activities/ .

S#	Sentences	IQ	EI
1	Seeing the hungry cat, I filled the bowl with milk and gave it to the cat.		
2	Ali scored the highest marks in the math test		
3	Hassan's greatest quality is that he gives great importance to every member of the cricket team and listens carefully to everyone.		
4	Sania gave the correct answer to every question asked during the job interview.		
5	Ahmed was very sad when he got low marks in the test but Miss Samra encouragement promoted in him the desire to work hard.		
6	Get computer education from Mr. Ilyas. He has mastered in every program.		
7	Daniyal took care of the sacrificial animals with love and affection.		
8	Ali's Friends organized a grand feast on his success		
9	Miss Naila seems to have memorized all the proverbs/idioms.		
10	Ahmed felt so happy by giving quilts and dry fruits to old employee in the winter season.		

Handout # 2.3.B: Social-Emotional Learning - (Interactive CASEL Wheel)

The Collaborative for Academic, Social, and Emotional Learning aims to make evidence-based social and emotional learning (SEL) an integral part of education from preschool through high school and human development. SEL is the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions.

SEL advances educational equity and excellence through authentic school-family-community partnerships to establish learning environments and experiences that feature trusting and collaborative relationships, rigorous and meaningful curriculum and instruction, and ongoing evaluation. SEL can help address various forms of inequity and empower young people and adults to co-create thriving schools and contribute to safe, healthy, and just communities.

Self-Awareness

The abilities to understand one's own emotions, thoughts, and values and how they influence behavior across contexts. This includes capacities to recognize one's strengths and limitations with a well-grounded sense of confidence and purpose.

Such as:

- Integrating personal and social identities
- Identifying personal, cultural, and linguistic assets
- Identifying one's emotions
- Demonstrating honesty and integrity

- Linking feelings, values, and thoughts
- Examining prejudices and biases
- Experiencing self-efficacy
- Having a growth mindset
- Developing interests and a sense of purpose

Self-Management

The abilities to manage one's emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations. This includes the capacities to delay gratification, manage stress, and feel motivation and agency to accomplish personal and collective goals. Such as:

- Managing one's emotions
- Identifying and using stress management strategies
- Exhibiting self-discipline and self-motivation
- Setting personal and collective goals
- Using planning and organizational skills
- Showing the courage to take initiative
- Demonstrating personal and collective agency

Social Awareness

The abilities to understand the perspectives of and empathize with others, including those from diverse backgrounds, cultures, and contexts. This includes the capacities to feel compassion for others, understand broader historical and social norms for behavior in different settings, and recognize family, school, and community resources and supports. Such as:

- Taking others' perspectives
- Recognizing strengths in others
- Demonstrating empathy and compassion
- Showing concern for the feelings of others
- Understanding and expressing gratitude
- Identifying diverse social norms, including unjust ones
- Recognizing situational demands and opportunities
- Understanding the influences of organizations and systems on behavior

Relationship Skills

The abilities to establish and maintain healthy and supportive relationships and to effectively navigate settings with diverse individuals and groups. This includes the capacities to communicate clearly, listen actively, cooperate, work collaboratively to problem solve and

negotiate conflict constructively, navigate settings with differing social and cultural demands and opportunities, provide leadership, and seek or offer help when needed. Such as:

- Communicating effectively
- Developing positive relationships
- Demonstrating cultural competency
- Practicing teamwork and collaborative problem-solving
- Resolving conflicts constructively
- Resisting negative social pressure
- Showing leadership in groups
- Seeking or offering support and help when needed
- Standing up for the rights of others

Responsible Decision-Making

The abilities to make caring and constructive choices about personal behavior and social interactions across diverse situations. This includes the capacities to consider ethical standards and safety concerns, and to evaluate the benefits and consequences of various actions for personal, social, and collective well-being. Such as:

- Demonstrating curiosity and open-mindedness
- Learning how to make a reasoned judgment after analyzing information, data, and facts
- Identifying solutions for personal and social problems
- Anticipating and evaluating the consequences of one's actions
- Recognizing how critical thinking skills are useful both inside and outside of school
- Reflecting on one's role to promote personal, family, and community well-being
- Evaluating personal, interpersonal, community, and institutional impacts

Handout # 2.4 (A): Monograde & Multi-grade Classroom

INSTRUCTION:

1. Work in groups, Read and discuss the handout 2.4A within groups. Share your learning with whole class interactively.

2. Fill the handout 2.4B of Van Diagram after watching the video link https://www.youtube.com/watch?v=RokdoyXPCHg and share with each other interactively.

Monograde & Multi-grade Classroom

A **monograde classroom** is one in which **students of a single grade level** are taught by one or more teachers. The instructional content, curriculum, and teaching strategies are specifically tailored to the developmental stage and academic level of that particular grade.

Definition: "Monograde teaching involves teaching children who are at approximately the same stage of development or grade level, typically found in most urban or well-resourced schools."
— Little, A.W. (2001). *Multi-grade Teaching: Towards an International Research and Policy Agenda*. International Journal of Educational Development.
Example #1: In most urban and well-resourced rural schools, you will find separate classrooms for each grade level. For instance, Grade 1 students will be in one room with their Grade 1 teacher, Grade 2 in another with their Grade 2 teacher, and so on, up to Grade 5. This is the ideal and more common setup where resources and student numbers permit.

A **multi-grade classroom** refers to a learning environment where **students from two or more grade levels are taught together** in the same physical space by the same teacher. This often occurs in rural or remote areas where student populations are too small to justify separate classes for each grade.

Definition: "Multi-grade classes are classes in which students of two or more grade levels are taught by one teacher in one classroom." &

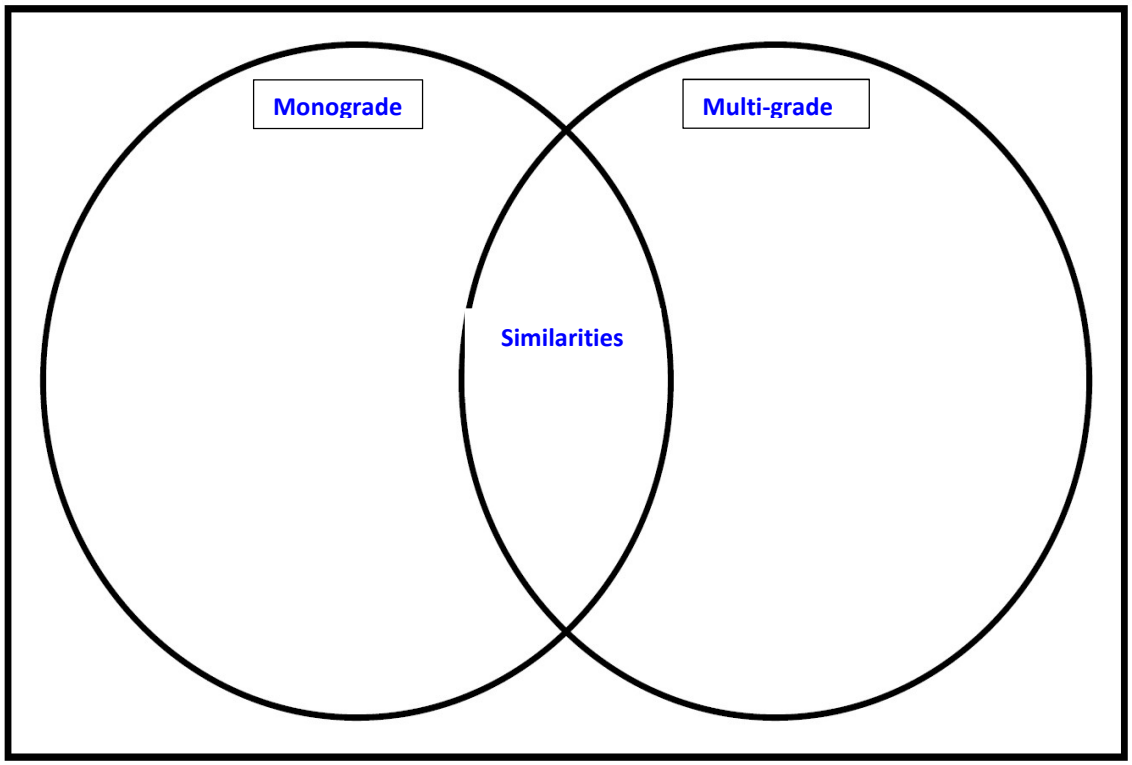
"Multi-grade teaching involves a single teacher instructing students across multiple grade levels in the same classroom."
— Veenman, S. (1995). *Cognitive and non cognitive effects of multi-grade and multi-age classes: A best-evidence synthesis*. Review of Educational Research, 65(4), 319–381.

Example#1: A school in a remote village might have a limited number of students. Instead of having a separate teacher and classroom for each grade, they might combine grades. For example, a single classroom could house students from grades 1, 2, and 3.

Example#2: Shortage of teachers, classrooms, and other infrastructure often necessitates combining students from different grade levels into a single classroom.

Example#3:A single teacher might be responsible for teaching students in grades 1, 2, and 3 in one classroom due to a shortage of teachers or a small number of students in each grade.

Handout # 2.4 (B): Differences and Similarities of Monograde & Multi-grade Classroom



Handout # 2.5 A: Timetable for Multi-grade Classroom

INSTRUCTION:

Work in groups, read and discuss the handout within your groups. The handout presents sample timetables for multi-grade and/or mono grade classrooms. Develop understanding about these sample timetables, identify similarities and differences and develop timetables for mono & multi-grade classrooms on given format according to the needs of your school & classroom. Remember the Provincial Notification from the Competent Authority about giving place to One Reading Period per day in school/classroom timetables and plan accordingly. Afterwards, display your developed timetable in gallery and invite other groups to visit your presentation and provide feedback.

This timetable outlines the weekly schedule for a Multi-grade class of ECCE to Grades 3. It details the foundational Learning activities covered each day, including Reading, Writing, Numeracy activities, Physical and Socio-Emotional Learning. Time is allocated for specific skill and activities where multi-grade students learn together.

Sample Timetable 1:

Day / Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00-8:45	**Assembly & Circle Time**	**Assembly & Circle Time**	**Assembly & Circle Time**	**Assembly & Circle Time**	**Assembly & Circle Time**	**Assembly & Circle Time**
8:45-10:00	**Urdu/ Sindhi** Phonemic Awareness	**Urdu/ Sindhi** Matching letters to sounds	**Urdu/ Sindhi** Recognizing letters and sounds	**Urdu/ Sindhi** Phonics: Fluently decoding words	**Urdu/ Sindhi** Basic Vocabulary: Learning words through stories and conversation	**Urdu/ Sindhi** Reading: read small sentences of 4 to 5 simple words with basic comprehension
10:00 –11: 00	**English** Recognizing rhymes and beginning sounds	**English** Phonics: Fluently decoding words	**English** Recognition: Recognizing common words	**English** Simple Reading: Read simple words of 2 to 3 letters Word	**English** Basic Vocabulary: Learning words through stories and conversation	**English** Reading: read small sentences of 4 to 5 simple words with basic comprehension
11:00- 11:30	**BREAK**					
11:30- 12:30	**Numeracy** Number Recognition: Recognizing numbers	**Numeracy** Counting: Objects and one-to-one correspondence	**Numeracy** Read and Write: Numbers	**Numeracy** Addition/ Subtraction	**Numeracy** Measurement: lengths/weights	**Numeracy** Understand simple math stories
12:30 – 1:00	**Free Time Play/Rhymes**	**Free Time Play/Rhymes**	**Free Time Play/Rhymes**	**Free Time Play/Rhymes**	**Free Time Play/Rhymes**	**Free Time Play/Rhymes**

Sample 2:

نمونہ ہفتہ وار نظام الاوقات برائے کثیر الجماعتی تدریس

دن/وقت	8:00- 8:30	8:30- 9:05	9:05 -9:40	9:40-10:15	10:15-10:50	10:50- 11:20	11:20- 11:55	11:55-12:30	12:30-01:00
سوموار	اسمبلی وناظرہ	سندھی /اردو تمام جماعتیں یکجا، تدریس بذریعہ مدرس	سندھی /اردو تمام جماعتیں یکجا۔ تدریس بذریعہ مدرس	انگریزی تمام جماعتیں یکجا۔ تدریس بذریعہ مدرس گروپ 3-1 کی نگرانی بذریعہ رضاکار، 5-4 نگرانی مدرس	سائنس تمام جماعتیں یکجا تدریس بذریعہ مدرس پیئر ٹیوٹنگ 3-1، 5-4	BREAK	ریاضی تمام جماعتیں یکجا تدریس بذریعہ مدرس نگرانی 3-1 رضاکار	اسلامیات تمام جماعتیں یکجا تدریس بذریعہ مدرس	معاشرتی علوم تمام جماعتیں یکجا تدریس بذریعہ مدرس
منگل	اسمبلی وناظرہ	سندھی /اردو تمام جماعتیں یکجا، تدریس بذریعہ مدرس	انگریزی تمام جماعتیں یکجا۔ تدریس بذریعہ مدرس	انگریزی تمام جماعتیں یکجا۔ تدریس بذریعہ مدرس گروپ 3-1 کی نگرانی بذریعہ رضاکار، 5-4 نگرانی مدرس	سائنس تمام جماعتیں یکجا تدریس بذریعہ مدرس پیئر ٹیوٹنگ 3-1، 5-4		ریاضی تمام جماعتیں یکجا تدریس بذریعہ مدرس نگرانی 5-4 رضاکار	اسلامیات تمام جماعتیں یکجا تدریس بذریعہ مدرس	معاشرتی علوم تمام جماعتیں یکجا پیئر ٹیوٹنگ 5-3
بدھ	اسمبلی وناظرہ	ریاضی تمام جماعتیں یکجا، تدریس بذریعہ مدرس	ریاضی تمام جماعتیں یکجا۔ تدریس بذریعہ مدرس	انگریزی تمام جماعتیں یکجا۔ تدریس بذریعہ مدرس	سائنس پیئر ٹیوٹنگ نگرانی مدرس 3-1 نگرانی رضاکار 5-4		سندھی /اردو تمام جماعتیں یکجا تدریس بذریعہ مدرس	معاشرتی علوم/ معلومات عامہ تمام جماعتیں یکجا تدریس بذریعہ مدرس	اسلامیات تمام جماعتیں یکجا پیئر ٹیوٹنگ 5-3

Sample 3: Time Table for Monograde Class

Day → / Time ↓	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00-8:45	Assembly & Circle Time	Assembly & Circle Time	Assembly & Circle Time	Assembly & Circle Time	Assembly & Circle Time	Assembly & Circle Time
8:45-10:00	Urdu/Sindhi	Urdu/Sindhi	Urdu/Sindhi	Urdu/Sindhi	Urdu/Sindhi	Urdu/Sindhi
10:00–11: 00	English	English	English	English	English	English
11:00-11:30	**BREAK**					
11:30-12:30	Numeracy Skill	Numeracy Skill	Numeracy Skill	Numeracy Skill	Numeracy Skill	Numeracy Skill
12:30 –1:00	Free Time Play/Rhymes	Free Time Play/Rhymes	Free Time Play/Rhymes	Free Time Play/Rhymes	Free Time Play/Rhymes	Free Time Play/Rhymes

Note: For Specific Class Timetable "Foundational Literacy and Numeracy Competency Benchmarks from ECCE to Grade 3" should be focused.

Blank Timetable Grid for Mono/Multi-grade Classroom

Instruction: Develop timetable for your mono/multi-grade school/classroom

Day → / Time ↓	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00-8:45						
8:45-10:00						
10:00 – 11: 00						
11:00- 11:30	**BREAK**					
11:30- 12:30						
12:30 – 1:00						

Activity # 2.6 Analytical Grid for Planning of Teaching (English & Basic Mathematics)

INSTRUCTION:

1 Work in groups, read and discuss the handout within groups. Below are sample Analytical Grids that will help in planning for your teaching especially in a multi-grade classroom. You start with identifying and/or pulling out ELOs/SLOs for teaching of foundational literacy/numeracy from textbooks to plan for your teaching in multi-grade situation.
2 Develop understanding about differences between lesson plan formats for multi-grade and monograde teaching (Handouts 2.6 B & 2.6 C).
3 Read and discuss the scripted lesson plans for literacy & numeracy in mono/multi-grade classrooms.
4 Work in groups, select ELOs/SLOs from the Analytical Grid and develop one lesson plan for your Mono & Multi-grade classroom teaching.
5 Share and review developed lesson plans in pairs.

Analytical Grid for Foundational Literacy:

Sr. #	Topics /Theme	Grade Wise ELOs & SLOs				Teaching Strategies
		ECCE	Grade 1	Grade 2	Grade 3	
1	Listening &Speaking(oral Communication) skills	Talk about self-experiences and feelings, Joy, sorrow with peers and adults	Articulate, recognize and use some formulaic expressions. i.e. offering, responding, listening, expressing	Articulate recognize and use formulaic expressions to offering, responding, expressing, introduce self and talk about family.	Articulate ,recognize and use some formulaic expressions to offering responding to Greetings ,express and show gratitude and regret, likes ,dislikes, needs, feelings and opinions in simple sentence.	Role Play Dialogue Sharing Rhymes Story Telling

2	Listening &Speaking(oral Communication) skills	Express their ideas with clarity and share their plans for the day.	Demonstrate use of common conventions and dynamic of oral interaction Exchange basic routine greetings, social courtesies. Express likes, needs and enjoyment by playing	Demonstrate use of common conventions and dynamic of oral interaction Exchange basic routine greetings, social courtesies. Express likes ,dislikes ,needs and feeling, enjoyments with playing	Demonstrate use of common conventions and dynamics of groups and oral interaction to exchange routine greetings. Express politeness to seek attention, agree ,disagree, lead ,follow, likes ,dislikes, needs, feelings ,enjoy	Role Play Dialogue Sharing Rhymes Story Telling Pair communication Show & tell Picture stories Picture flash cards Recitation of Poems. Plan ,do and review activity.
3	Reading Skill	Recognize the beginning and ending sounds of word.	Articulate ,identify and differentiate between the sounds of individual letters in a word.	Articulate ,identify and differentiate between the sounds of individual letters, digraph and trigraph at initial and final position in a word.	Articulate and identify words containing digraph and trigraph in initial, middle and final position.	Story reading Look and say activity Look and read Worksheets for starting middle and ending sounds Bingo games
4	Reading Skill	Identify and name the characters in the story.	Read Aloud words with reasonable level of accuracy in pronunciation	Read Aloud words and simple sentences with reasonable level of accuracy in pronunciation.	Read Aloud for accurate reproduction of sounds of letters and words.	Story reading Look and say activity Look and read Worksheets for starting middle and ending sounds Bingo games, Scrabbles
5	Writing skill	Trace and copy the letters of alphabets.	Copy and write simple one syllable words with correct spellings. Leave regular spaces between words	Write simple two or three syllables words with correct spellings. Leave space between words	Write multiple syllables words with correct spellings	Board games Alphabets jumbling cards Picture cards Worksheets of tracing, and drawing.

6	Writing Skill	Recognize letter of the alphabets and their names in print.	Trace/copy simple sentences leaving spaces between words, using utilization, punctuation and spellings. correct capitalization.	Construct simple sentences of three to six words using correct capitalization, punctuation and spellings.	Write sentences of their own using correct capitalization, punctuation and spellings.	Board games Alphabets jumbling cards Picture cards Worksheets of tracing, and drawing
Note : More ELOs and SLOs can be carried out from the relevant curriculum						

Analytical Grid Foundational Numeracy (Basic Mathematics)

Sr. #	Topics /Theme	Grades wise ELOs & SLOs				Teaching Strategies
		ECCE	Grade 1	Grade 2	Grade 3	
1	Number	Recognition of number up to 9.	Number up to 100.	Read, write and compare Number up to 999 &	Read and write given numbers up to 1 lac in numerals.	Worksheets of comparing, identifying, sequencing, and blanks Manipulative games Flash cards Board games
2	Number operations	Number counting up to 9, more,& less	Addition & subtraction (1 digit number)	Addition and subtraction (2 digits numbers)	Addition and subtraction (4 digits numbers with and without carrying and borrowing)	comparing, identifying, sequencing, and blanks Manipulative games Flash cards Board games
3	Measurement	Describe and compare using length, weight	Comparison of objects (long & short, heavy & light)	Use appropriate units of length to measure with ruler (standard units).	Measure and write standard and non-standard units of length .	comparing, identifying, sequencing and blanks Manipulative games Flash cards Board games
4	Time Telling	Relate story with things happening in morning, Afternoon , evening and night.	Recognize the hours and minutes hands of an analog clock.	Know the numbers of hours in a day and numbers of minutes in an hour.	Use a.m. and p.m. To record the time from 12-hour clock	comparing, identifying, sequencing, and blanks Manipulative games Flash cards Board games

5	Geometry	Recognition of names and color and shapes in environment	Identification of basic shapes from the real life objects.	Identification of shapes of 2D square, Rectangle, Triangle	Classify figures according to numbers of sides as quadrilateral and triangle.	comparing, identifying, sequencing, and blanks Manipulative games Flash cards Board games

Handout # 2.6 B: Lesson Plan Format for Multi-grade Classroom

1.Theme/Topic: Select a broad theme that is relevant to all grade levels for foundational Literacy or Numeracy.

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2. Student Learning Outcomes: Define Expected/Student learning outcomes for each grade level for foundational Literacy or Numeracy.

ECCE:

Grade 1:

Grade 2:

Grade 3:

---

3. Materials: Gather materials that are appropriate for all grade levels.

---

4. Activities:

Introduction (Whole Class): Introduce the theme and engage students in a shared activity.

Differentiated Activities (Grade-Specific/Group Work):

- Provide grade-appropriate activities that address the specific learning objectives.
- Include independent work, group work, and teacher-led instruction.

Sharing and Closure (Whole Class):

- Bring the class back together to share their learning and summarize the key concepts.

---

5. Assessment:

- Plan for ongoing assessment to monitor student progress in Foundational Literacy or Numeracy.
- Observe student participation and completion of activities and review worksheet or group charts.

Points to be noted:

- **Time Management:** Multi-grade teaching requires excellent time management skills.
- **Classroom Arrangement:** Arrange the classroom to facilitate group work and independent learning.
- **Resource Availability:** Ensure that sufficient resources are available for all grade level

Handout # 2.6 C: Lesson Plan Format for Monograde Classroom

LESSON PLAN

1- SUBJECT: _____

2-CLASS: _____

3- TOPIC: _____

4- Time:_____

5-Concept(s): _____

6- Student Learning Outcomes:

i)_____

ii)_____

iii_____

7-Instructional Material (Resources):

_____

8-What Knowledge learners possess prior to the introduction of the lesson/topic.

(Teacher may use narration of some events, stories, social activities of the area, reading the newspaper, magazine, use QA with learners, discuss the previous topic etc.)

9-What knowledge is to be imparted?

Organization of activities/experiences, explanation, demonstration, individual/peer/pair/group, practicum, developing material, solving exercises, writing material, speaking, working together etc.

_____

_____

10-What Learning has taken place as a result of interaction/experiences provided? Assessment for students learning outcomes

_____ _____

Sample Lesson Plans for Teaching of Foundational Learning in Multi-grade and Monograde Classrooms

1. Sample Lesson Plan for Teaching of Numeracy in Monograde Classroom

1- SUBJECT: **Numeracy Skill (Foundational Learning)**

2-CLASS: **Three**
3- TOPIC: **Measurement**
4-Time: **50 minutes**
5-Concept(s): **Unit of Length (Standard Unit)**
6- Student Learning Outcomes:
Students will be able to:
i) measure the length of object with the help of ruler.
ii) write different objects length in standard unit.
iii) discover their own height and their peers/classmates. (who is short and who is tall)
7-Instructional Material (Resources):
Papers, pencils, rulers, measuring tape, different objects or pictures, board, chalk
8-What Knowledge:

1. The teacher will show pair of different objects or pictures (at least 5 to10) and will ask students about their length and height in comparison.

- Which one is long/ short?
- Which one is tall and short?

2. Then, teacher will have a lively discussion of some story characters (like mouse and lion, bird and an ant etc.) to develop the interest.

- Who was small and who was big?

9-What knowledge is to be imparted?
Organization of activities/experiences, explanation, demonstration, individual/peer/pair/group, practicum, developing material, solving exercises, writing material, speaking, working together etc.

1. Teacher will draw a picture on a board and will measure the object with ruler. Teacher will explain the way of measuring while activity. And will write the measurement on board.
2. She/he will engage the students throughout the activity that what they are looking and will observe their learning and engagement.
3. Next, Teacher will provide the different pictures of objects i.e. banana, parrot, apple, kite, etc. to students. Then she/he will ask students to have a ruler and measure the object as the teacher did. During this process teacher will frequently checks understanding of students and observe students' learning.
4. Teacher will call two students from class and will measure their height with ruler-tape and will write their measurement on board.
5. Teacher will ask students to measure their peers /class-mates height and compare who is tall and who is short. While this activity teacher will support and help students in measuring and will also observe students learning. (she will re-teach if needed at this stage).

11-What Learning

1. Teacher will distribute the plain paper to every student and will ask them to draw any figure they want.
2. Then, she will ask them to measure the picture with ruler they drawn.
3. Next, the students will be asked to write their measurement on paper.
4. Teacher will ask students to exchange their picture with student sitting next to her/him to measure each other picture.
5. Throughout this activity teacher will keep observing and appreciating.

11-Home Assignment

Teacher will summarize the topic and will assign a task to students to observe the different objects or family members at home about their height.

2. Sample Lesson Plan for Teaching of Literacy in Monograde Classroom

SUBJECT: Literacy Skill (Foundational Learning)
CLASS: Two
TOPIC: Reading & Writing Skill
Time: 50 minutes
Concept(s): Two Syllable words
Student Learning Outcomes:
Students will be able to:

i) Identify simple two syllable words from text.
ii) Write simple two syllable words with correct spellings.
iii) Make new words containing of two syllables.

7-Instructional Material (Resources):
Two colors of small cards (Alphabets jumbling cards), pencils, rubber, books, pictures cards/flashcards, board, chalk, worksheets and color pencils

8-What Knowledge:

3. The teacher will show some picture cards and will ask students about them. What it is?
4. Next, teacher will show some flashcards written with two syllable words. And will ask what is written?
5. Teacher may carry this activity with different surrounding objects also.

9-What knowledge is to be imparted?

1. Teacher will use some pictures cards highlighting with two syllable words and will read the word with pausing between syllables, like Man go.
2. Teacher will repeat the same word with pausing between syllables and will use her/his fingers by opening a finger on each syllable.
3. Teacher will ask the students to open their fingers with teacher on each syllable of word they pronounce and will ask them that how many fingers are being opened while pronouncing each word.
4. Next, teacher will show some more pictures and ask what they are seeing in them. Students will have to open their fingers when they say words. Teacher will write the words on board with visible font and underline the syllables.
5.

Syllable Match ups (Group Activity)

6. Teacher will make small groups of students (5 or 6 students)
7. She/he will distribute any type of two syllable words mix up cards pieces and will give each group a pack of syllables. (already design in two colors cards).
8. Students need to match up each piece to make a new real two syllable word. They will make as many words as they can and will write these words in their copies with correct spelling.
9. The students will be asked to read the words in their groups and will try to correct the pronunciation by their peers (if needed).
10. While the activity, teacher will support and help students to carry the activity in effective manner. She/He will also keep observing the students learning. (Teacher may use re-learn strategy if required)

10.What Learning

Find me out (Individual Activity)

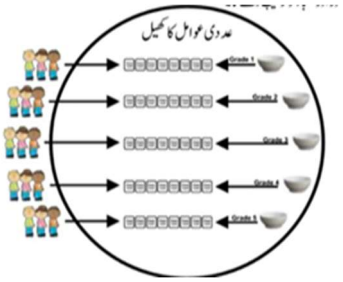
6. Teacher will ask students to open any lesson/ simple text from their book or storybook.
7. She/He will distribute worksheets to every student simply two blocks column drawn on it.
8. Teacher will ask students to read the text and identify two syllable words from it.
9. Teacher will ask students to write the identifying words on given worksheet in appropriate syllable column.
10. Students will be asked to highlight the syllable one and two with two different colors.
11. Teacher will ask students to share their work with all students.
12. Throughout the activity teacher will keep observing and will use appreciating remarks to boost up students learning.

11- **Home Assignment**

Teacher will assign a task to students that they have to read any available story book and write 10 two syllable words in their note book.

3. Sample Lesson Plan for Teaching of Numeracy for Multi-grade Classroom

S#	Activity	Activity Details and Instructions
1	**Theme/Topic**	Number Operation
2	**Grade wise Student Learning Outcomes**	Students will be able to learn; ECCE: Number Counting up to 20 Grade 1: Addition (1 digit number) Grade 2: Addition (2 digits numbers) Grade 3: Addition (4 digits numbers with and without carrying)
3	**Materials:**	Bowls or Boxes, Flashcards, Chalk, Marker, Worksheets
4	**Activities**	**Manipulative Game**
5	**Introduction (whole Class)**	Introduce the theme and engage students in a shared activity.

6	Grade-appropriate activities that address the specific learning objectives. 	1. Teacher will make a big circle on floor. 2. He/ She will arrange the bowls/boxes, flashcards and students as shown in picture. 3. The teacher will ask students by saying '1,2,3 GO'. One student will run and will pick a card and will solve the problem. 4. Then, students will write their name on the flashcards and will stand at the end of the row. (ECCE learners will call their own name loudly) 5. While the activity, the teacher will note that every child has given two minutes to solve problem. 6. The activity will be continued till every child be part of it. 7. In the end, the teacher will ask students to sit and will correct the wrong question without calling the name of students and will encourage the students.
7	Independent work, group work, and teacher-led instruction focusing on social emotional learning	1. The teacher will make small group of students. One student from each class. 2. The teacher will make more circles for every group and ask every group to repeat the same activity. While activity, higher grade students will lead the group. 3. The teacher will facilitate the students during the whole activity (15 minutes will be allocated for completion to this task) 4. At the end, the teacher will appreciate to boost up the learning activity.
8	**Sharing and Closure (Whole Class)** Bring the class back together to share their learning and summarize the key concepts	1. The teacher will ask students to sit on their seats then will ask students to share their enjoyment and learning experiences.

		2. The teacher will end with the recapitalization of the concept.
9	**Assessment:** **Plan for ongoing assessment to monitor student progress in Foundational Numeracy.**	1. The teacher will provide worksheets or work cards to all students according to their classes and ask them to complete the task. 2. Peer feedback: the teacher will ask higher grade students to collect young students' worksheet and to give feedback on it.
10	**Observe student participation and completion of activities and review worksheet.**	While assessment process teacher will facilitate, observe and review students work and provide his/her feedback to students.

4. Sample Lesson Plan of Literacy for Multi-grade Classroom

S#	Activity	Activity Details and Instructions
	Theme/Topic	Foundational Literacy/ Reading Skills
	Student Learning Outcomes	**Students will be able to;** ECCE: Identify and name the characters in the story. Grade 1: Read Aloud words with reasonable level of accuracy in pronunciation. Grade 2: Read Aloud words and simple sentences with reasonable level of accuracy in pronunciation. Grade 3: Read Aloud for accurate reproduction of sounds of letters and words
	Materials	Story Books, flashcards, board, tape, scissors and worksheets
	Activity	Story Telling
	Introduction (Whole Class)	teacher will introduce the story book and engage students in a shared activity
	Differentiated Activities (Grade-Specific/Group Work) Provide grade-	1. **Large group activity** • Teacher will make students sit in a big circle on floor. • He/ She will arrange the picture story books. (2 or 3 same story books, if possible) • Teacher will hide the text with some chits before showing the

	appropriate activities that address the specific learning objectives.	story book.
		2. Model Story Telling: Teacher will tell the story to students with appropriate expression, intonation and pronunciation. Meanwhile he/she will engage the ECCE students by asking what they are seeing in storybooks and other students to predict the next.
		3. Loud Reading: Next, teacher will ask the higher-grade students to read aloud the story in front of whole class.
		4. **Look and Read:** After that, teacher will show the flash cards that depicting the same story and ask students (focusing lower-grade) to tell the story.
		5. In the end, the teacher will correct the wrong pronunciation of the words if any student made without calling the name of students and will encourage the students.
	Independent work, group work, and teacher-led instruction focusing on social emotional learning	1. Teacher will make small mix group of students and ask them to look, read and tell the story to each other. While activity, higher grade students will lead the group. 2. The teacher will facilitate and observe students during the whole activity. 3. At the end, the teacher will appreciate to boost up the learning activity.
	Sharing and Closure (Whole Class): Bring the class back together to share their learning and summarize the key concepts.	1. The teacher will ask students to share their enjoyment and learning experiences about story. 2. The teacher will end with the recapitalization of the story.

	Assessment: Plan for ongoing assessment to monitor student progress in Foundational Literacy	1. Teacher will ask students to sit with their same grade students and provide worksheets 0r work cards to students according to grade level except ECCE. 2. For ECCE, flashcards will be used to recognize the characters in the story she told. 3. Class one worksheet; Tagging objects and read aloud. 4. Class two worksheet; matching words with simple sentences and reading aloud them. 5. Class three worksheet; pasting and sequencing the sentences written on paper strip and read aloud the story in appropriate manner.
	Observe student participation and completion of activities and review worksheet or group charts.	The teacher will facilitate, observe and review students work and provide his/her feedback to students.

DAY-3

Handout 3.2: Introduction of Domains of Bloom's Taxonomy

INSTRUCTION:

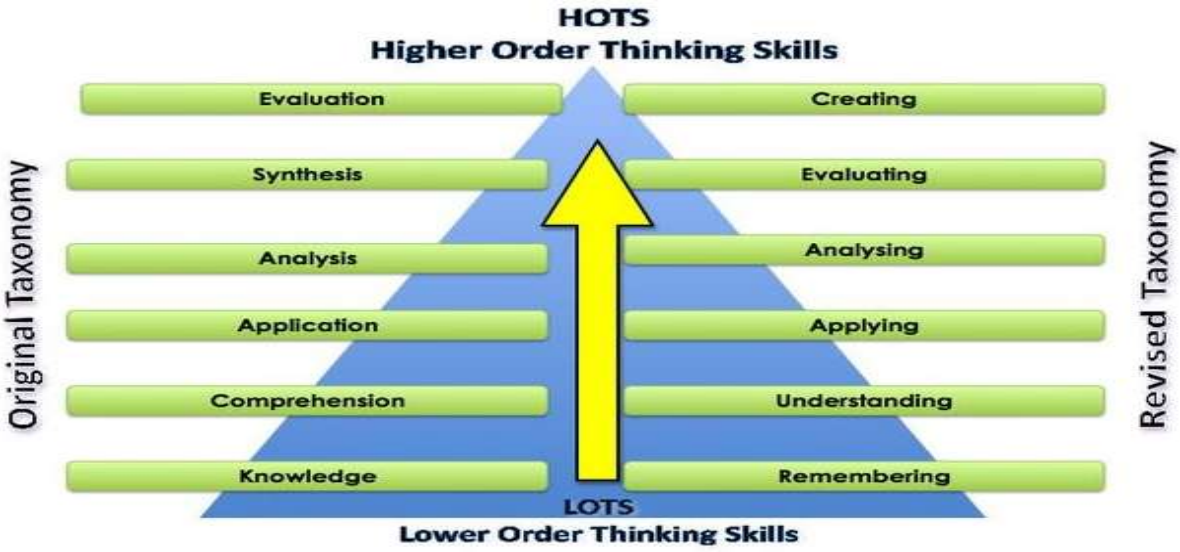
1. Work in groups, read and discuss the handout among within groups on following topics.
   - **Group 1**: Cognitive Domain
   - **Group 2:** Affective Domain
   - **Group 3:** Psycho motor Domain

2. Write down key findings of your respective assigned topics and share as presentation with whole class.

Benjamin Bloom, an American educational psychologist made contributions to the classification of educational objectives and to the theory of mastery learning. Bloom's taxonomy takes students through a thought process of analyzing information or knowledge critically. Bloom proposed Taxonomy in 1956 in which three domains of learning were identified. The domains included:

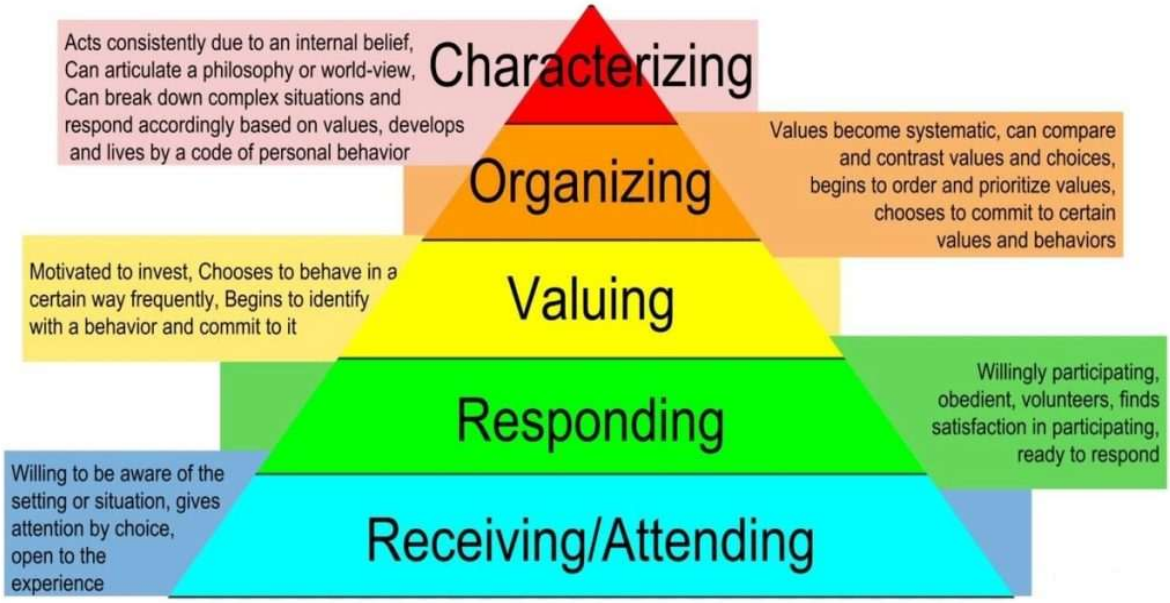
(1) Cognitive (mental)

In the original version of the taxonomy, the cognitive domain is further divided into six (6) levels. Revised edition of Bloom's Taxonomy in 2001, the levels are slightly different from original Taxonomy: Remember, Understand, Apply, Analyze, Evaluate, and Create (rather than synthesize). The name is changed from Noun to Verb form.



(2) Affective (emotional/feelings/attitude)

Skills in the affective domain describe the way people react emotionally and their ability to feel other living things' pain or joy. Affective objectives typically target awareness and growth in attitudes, emotions, and feelings.


Acts consistently due to an internal belief, Can articulate a philosophy or world-view, Can break down complex situations and respond accordingly based on values, develops and lives by a code of personal behavior
Characterizing
Values become systematic, can compare and contrast values and choices, begins to order and prioritize values, chooses to commit to certain values and behaviors
Organizing
Motivated to invest, Chooses to behave in a certain way frequently, Begins to identify with a behavior and commit to it
Valuing
Willingly participating, obedient, volunteers, finds satisfaction in participating, ready to respond
Responding
Willing to be aware of the setting or situation, gives attention by choice, open to the experience
Receiving/Attending

(3) Psychomotor (physical ability) skills:

The psychomotor objective is specific to physical function, reflex actions, and body movements to interpret information and learn. It implies that physical activity supports or is a vehicle for cognitive growth and furthering knowledge or skills. The learner uses physical action to achieve a cognitive or affective objective.

Bloom's taxonomy begins with knowledge/memory and slowly pushes students to seek more information based upon a series of levels of questions and keywords that brings out an action on the part of the student. Taxonomy helps the teachers to understand the objectives/SLOs of classroom teaching. It guides them to change the complexity of the questions and helps students to achieve higher levels of hierarchy. Further, it helps to develop critical thinking among teachers. The purpose of teachers and teacher trainers' using Bloom's taxonomy is to encourage higher-order thinking skills in the students by building up from lower-level cognitive skills.

As a matter of fact, Bloom's Taxonomy is a tool about thinking. Its framework can provide us with ideas to create lessons, assignments, and projects aligned to essential outcomes that, over time, help students advance to more complex levels of thinking

Ref:

file:///C:/Users/Hassan%20Computers/Downloads/1.%20Teacher's%20Booklets%20%20%204-9-2018.pdf

Handout 3.3: Assessment & Its Types

INSTRUCTION:

Share your ideas during brainstorming session. Work in groups, read and discuss the handout. Prepare pictorial flash cards of your findings and your group presentation.

Present your presentation in gallery.

The Sindh Education Students' Learning Outcomes Assessment Framework (SESLOAF) aims to provide a standards-referenced approach to assessment in Sindh, Pakistan which promotes continuous, authentic, and standardized assessments. Necessary guidance from SESLOAF has been taken into consideration while developing this orientation material focused on assessment of foundational literacy, numeracy and social-emotional learning and skills of early grade children. One of the focuses of Actions to Strengthen Performance for Inclusive & Responsive Education (ASPIRE) project is promotion of Formative Assessment which is specifically described in the following sections.

What is Assessment & Its Types?

Assessment is the process of gathering information about students' knowledge/understanding, skills, and attitudes. It is used to identify students' strengths and weaknesses, track their progress, and inform instruction and policy decision making. There are different types of assessments, which can be broadly categorized into two groups: formative and summative.

Formative assessments are ongoing assessments that are used to provide feedback to students and teachers throughout the learning process. They help teachers identify what students are learning and where they need help. Examples of formative assessments include:

- Class discussions
- Exit tickets (short quizzes or writing prompts given at the end of a lesson)
- Homework assignments
- Observations
- Self-assessments

Summative assessments are used to measure student learning at the end of a unit, course, or program. They provide a snapshot of what students have learned and how well they have mastered the material. Examples of summative assessments include:

- Standardized tests
- Final exams
- Projects
- Papers

Other types of assessments include:

- **Diagnostic assessments:** These assessments are used to identify a student's prior knowledge and skills before they begin a new unit or course.
- **Criterion-referenced assessments:** These assessments measure a student's performance against a set of predetermined criteria.
- **Norm-referenced assessments:** These assessments compare a student's performance to the performance of other students.
- **Impassive assessments:** These assessments focus on a student's own improvement over time, rather than comparing them to others.

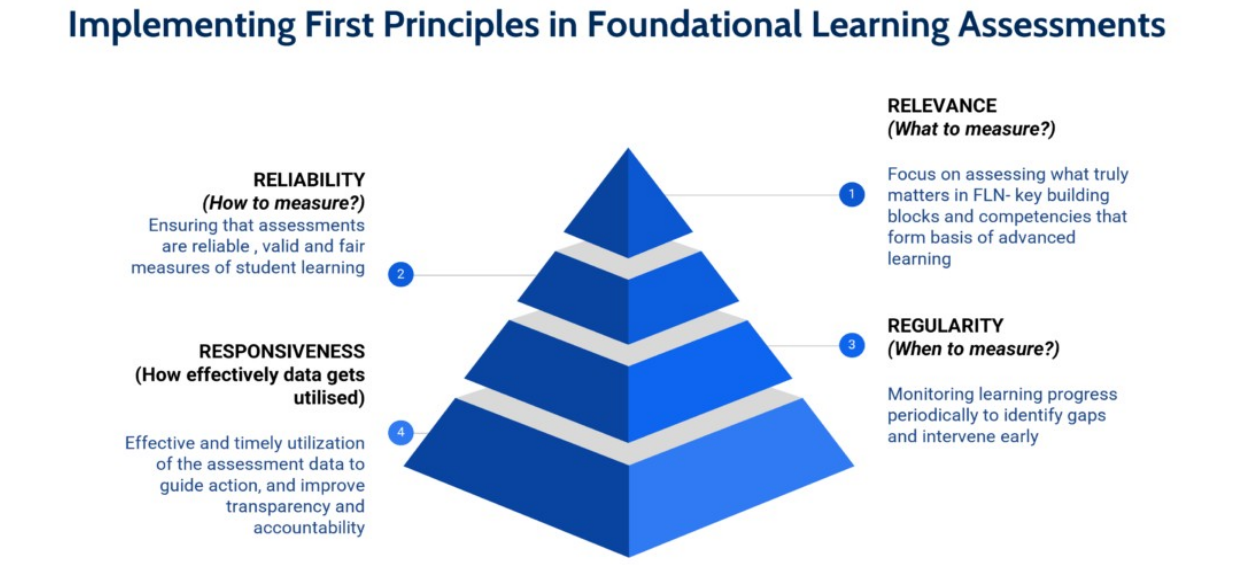
The best type of assessment to use will vary depending on the learning objectives, the students, and the context. Effective assessments should be aligned with the learning objectives, be reliable and valid, and provide meaningful feedback to students.

Handout # 3.4: Principles of Foundational Learning Assessment

INSTRUCTION:

Work in groups, read and discuss the handout and write down the key findings from the handout and prepare for your presentation in the form of Role play.

Assessments, if utilized effectively, can be a powerful tool for improving Foundational Literacy and Numeracy levels. They not only gauge the progress of a child's learning but also shape and inform teaching methodologies and strategies. By tuning these assessments to be more relevant, reliable, regular, and responsive, we can enhance the quality of education, enabling more meaningful learning experiences for children. Let's explore how each of these principles shapes the work we do for driving significant learning outcomes.
(By Pooja Nagpal Jul 11, 2023)


Implementing First Principles in Foundational Learning Assessments
RELEVANCE
(What to measure?)
Focus on assessing what truly matters in FLN- key building blocks and competencies that form basis of advanced learning
RELIABILITY
(How to measure?)
Ensuring that assessments are reliable , valid and fair measures of student learning
REGULARITY
(When to measure?)
Monitoring learning progress periodically to identify gaps and intervene early
RESPONSIVENESS
(How effectively data gets utilised)
Effective and timely utilization of the assessment data to guide action, and improve transparency and accountability
1
2
3
4

Implementing First Principles in Foundational Learning Assessments
Source: CSF

Relevance: Constructing Meaningful Assessments; The principle of 'Relevance' emphasizes that assessments should measure what truly matters in FL. They should focus on the essential skills and competencies that form the basis for more advanced learning.

we ensure relevance by employing the Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA) frameworks. These research-based frameworks reflect best practices and expert consensus on foundational skills critical for advanced learning. Our assessments are customizable to local contexts, taking into account variations in language,

culture, and education. Furthermore, we ensure alignment with national curricula and international benchmarks.

Reliability: Ensuring Accurate and Fair Measures: Reliability in FL assessments ensures that assessments are consistently fair and valid. They should measure what they're intended to do accurately and in a manner that is just for all students, irrespective of their backgrounds or learning styles.

This principle through several measures. We streamline data collection using Tangerine, an online tool that minimizes data entry and transcription errors and enhances accuracy. Real-time data analysis on Tangerine allows us to monitor and validate data instantaneously, ensuring reliable data for decision-making. Our commitment to data integrity extends to secure data storage and transmission. Quality Assurance checks during assessments and data forensic techniques are employed to identify and correct potential errors or anomalies in the assessment data.

Regularity: Monitoring Learning Progress Periodically

'Regularity' involves conducting assessments at routine intervals to track learning trajectories effectively. This provides valuable insights into each student's progress and helps in early identification of learning gaps.

we prioritize regular assessments and timely data dissemination. We monitor learning progress at regular intervals, which allows us to identify gaps early and provide targeted support. Assessments are conducted at multiple grade levels, enabling us to understand learning trajectories and critical transition points. The data from these regular assessments are shared promptly with key stakeholders, fostering data-driven decision-making.

Responsiveness: Making Effective Use of Data

Responsiveness' embodies the principle of effective and timely utilization of the collected assessment data. It necessitates a system's capacity to swiftly react to the insights drawn from assessments, adapting teaching methodologies, instructional materials, and even the assessments themselves. Responsiveness is about creating an agile and dynamic teaching-learning environment that continually improves based on the feedback activities. This responsive utilization of data enhances accountability and transparency. It encourages collaboration among all stakeholders to work towards common goals, and it ensures the continual improvement of foundational learning levels based on real, tangible data.

Activity # 3.5 Tools for Formative Assessment of Foundational Literacy and Numeracy Assessment(Observation, Checklist, Anecdotal ,Portfolio)

INSTRUCTION:

1. Brainstorm the different tools of Assessment and write responses on the board.

2.Work in groups,read and discuss the **handout # 3.5** within groups according to following manner.

- **Group 1**: Checklist
- **Group 2:** Observation
- **Group 3:** Anecdotal Record
- **Group 4:** Portfolio

1. **Develop an understanding on the assigned topics and individual and grade wise check list.**
2. **Show Hands-on implementation of these checklist and tools in front of whole class.**
3. **Discuss key findings interactively with whole class.**

Handout3.5

Tools for Formative Assessment of Foundational Literacy and Numeracy Assessment

The assessment framework consists of the following three strategies for assessing children knowledge, skills and dispositions with examples. It also provides examples for the formative purposes of the assessment strategies.

1. Observations of Children's Progress
2. Use of Checklist for recording Children's Progress
3. Keeping up with Personal Notes and Anecdotal Records
4. Keeping Portfolio of Children's Work

What is Observation?

When teachers observe a child in her/his classroom, they look at the whole child. While observing, the teacher watches the child closely and writes down what they see and hear. Observations can be done during different times of the lesson/day and when the child is involved in different activities. The date and time should be written for each observation.

Benefits of Observations

Through observations, a teacher can gather information about children's learning; assesses progress and modify the areas of input provision; designs the curriculum according to the needs

of children and ensures that all children are provided equal learning opportunities (Pardhan & Juma, 2020).

How to Record Observation?

Teachers can record their observations of children though different mediums. For instance, Notebook, a folder, Small cards, Paper cut into small 4x6 pieces and attached into a separate folder or notebook for each child, Separate portions in children's notebook (Pardhan & Juma, 2020, p. 101). Also, Checklists and Anecdotal Records are important means of recording observations.

Guidelines for Teachers

Below are some guidelines that teachers can follow while observing children:

1. Observe children over a period of time, at different times in a day and in different key learning areas i.e. personal and social development, language and literacy, basic mathematical concepts, physical development, and safety and creative arts.
2. To keep a proper track of a child's progress, note the date and time of each observation.
3. Develop a schedule of when and who will be observed to make sure that all children are observed routinely.
4. Decide a convenient and suitable way to keep a record of all the observations. (Pardhan & Juma, 2020, p. 101)

Samples of Observation Notes: Saima in the ECCE Classroom

Saima goes to the bookshelf in a corner of the classroom and takes an Urdu storybook from the shelf. She sits down on a pillow that is on the dari on the floor. She opens the book and begins to read the book from right to left. She looks up and watches the other children play. Another child comes to her and sits down beside Saima. Saima moves the book between her and the girl who has sat down beside her so that the girl can also see the book. The two girls look at the pictures together. They point to different pictures and talk about what is happening in the pictures. They smile and giggle as they talk. They turn the page over and look at the pictures on the next page. The girl gets up and says 'bye' to Saima. Saima smiles and waves her hand to the girl. Saima stands up and puts the book back into the shelf. She goes to the art area and takes a piece of paper and crayons. She sits on a chair, puts the paper on the table in front of her and begins drawing a picture.

Reflective Questions to assess Saima's learning development

a. How do you think Saima might have felt during this experience? What parts of the observation suggest to you how she might have felt this way?
b. What do you think Saima seems to enjoy doing?
c. What was Saima focusing and concentrating on?
1. What do you think Saima's teacher can do to plan activities and experiences for her

Observation Notes: Imran in the grade 2

Imran is an active child. He likes to run, jump, skip and hop. He finds it difficult to be inside the classroom for a full day. There is little room for Imran to move around the classroom. There are many students in the classroom. The classroom is small and over-crowded with desks. Imran enjoys being outside, running and playing. In the daily routine and feeling difficulty in reading and writing children due to less presence in classroom and learn with other students.

Reflective Questions to assess Imran's learning development

a. How do you think Imran might be feeling? What parts of the observation suggest you why he might be feeling this way?

b. What does Imran enjoy doing?

c. What do you think Imran's teacher can do to plan activities and experiences for Imran that help extend his foundational literacy skills?

What is Checklist of Children Progress?

The teacher should maintain a checklist for each child of the Expected/Student Learning Outcomes (E/SLOs) provided in the section on key learning areas of their lessons. A checklist should be written as a list of statements of the learning outcomes. Teachers should use a checklist and observation together to get a comprehensive understanding of a child's progress. The date and time should be written on each checklist.

Benefits of Checklist

Practitioners can use checklists to assess children's learning and development. It is helpful for teachers to check children's learning against what needs to be achieved. Checklists are also helpful for the self-assessment of children by using pictures and/or simple words and statements (Pardhan & Juma, 2011, p.101).

Types of Checklists

Checklists can be created in various ways. For example,

- A list of statements
- Points on a continuum
- Statements on a wheel showing progress

Some checklists allow for a more graduated marking for each item being assessed. For Example;

a) A child is beginning to understand a concept/skill

b) A child is gaining confidence and has some understanding of the concept/skill

c) A child fully understands and demonstrates knowledge of the concept or skill

Foundational Literacy & Social-Emotional Skills Assessment Checklist

NAME OF STUDENT_____ Grade_____ DATE_____

S #	PERFORMANCE STATEMENTS	EXCELLENT	V. GOOD	GOOD	FAIR	Needs Improvement
	PHONEMIC AWARENESS					
1	Hears and manipulates individual sounds (phonemes) in spoken words.					
2	Blending Sounds: Blends separate sounds to form a word? For example, /c/ /a/ /t/ to make "cat."					
3	Segmenting Words: Breaks a word into its individual sounds? For example, "dog" into /d/ /o/ /g/.					
4	Manipulating Sounds: Adds, deletes, or substitutes sounds in words? For example, changing "cat" to "bat" by substituting /c/ with /b/.					
	PHONETICS					
5	Demonstrates and understanding about the relationship between letter names and their sounds.					
6	Letter Sounds: Performs sounds of each letter.					
7	Decoding: Sounds out and reads simple words using their knowledge of letter-sound relationships.					
8	Grapheme-Phoneme Correspondence: Understands how graphemes (letters or letter groups) represent phonemes (sounds).					
	FLUENCY					
9	Able to read text accurately, quickly, and with proper expression.					
10	Reading Speed: Reads at an appropriate pace for their age e.g. 60 words per minute.					
11	Accuracy: Reads words correctly without frequent mistakes.					
12	Expression: Uses proper intonation and expression while reading aloud.					
	VOCABULARY					
13	Understands and enjoys what is read. It's important for lifelong learning.					
14	Word Meanings: Shows an understanding of the meanings of words they listen/read/encounter.					
15	Context Usage: Uses new words correctly in different contexts.					
16	New Words: Regularly learns and uses new words.					
	COMPREHENSION					
17	Able to understand and interpret what is read.					
18	Background Knowledge: Connects what they read to what they already know.					
19	Verbal Reasoning: Understands metaphors, inferences, and other complex language structures.					
20	Language Structures: Grasps the syntax and semantics of sentences they read.					

	SOCIAL, EMOTIONAL DEVELOPMENT					
21	Listens carefully/ attentively					
22	Responds to verbal/oral questions.					
23	Follows the instruction.					
24	Seems confident while performing activities.					
25	Helps his/her classmates.					
26	Shows excitement and curiosity about new things in the classroom (e.g. a new book, story books and new math counters).					
27	Talks to peers and others in a polite manner.					
28	Shares his/her feelings in a range of contexts (e.g. through speaking, writing and drawing).					
29	Expresses his/ her own likes and dislikes.					
30	Offers encouraging comments to others					

General Comments:

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Signature of Teacher _____ **Signature & Seal of Head of School _____**

Foundational Numeracy & Social-Emotional Skills Assessment Checklist

NAME OF STUDENT_____ Grade_____ DATE_____

S #	PERFORMANCE STATEMENTS	EXCELLENT	V. GOOD	GOOD	FAIR	Needs Improvement
	NUMBER/ NUMBER OPERATION					
1	recognizes the numbers up to 9/99/999/9999.					
2	Identifies the numbers up to 9/99/999/9999.					
3	Recites and reads the numbers up to 9/99/999/9999.					
4	Creates sequence number/patterns/objects.					
5	Counts the objects and match with number card.					
6	States the number that comes before any number, one to ten/ one to hundred on a number line.					
7	Compares collections that have the same number of members.					
	ADDITION/SUBTRACTION					
8	Understands the concept of Addition and Subtraction.					
9	Finds the sum of the objects on two cards.					
10	Adds objects from a set in preparation for addition.					
11	Removes objects from a set in preparation for subtraction.					
12	Uses manipulatives to find the sum for addition					
13	Uses manipulatives to find the difference for subtraction.					
14	Identifies the signs of '+' addition, '-' subtraction and '=' equal.					
15	Understands simple word problems in deciding whether to add or to subtract.					
	MULTIPLICATION/DIVISION					
16	Understands the concept of multiplication/division.					
17	Solves two- or three-digits numbers for multiplication/ division.					
18	Identifies the sign of "x" (multiply) and "/" (division) sign.					
19	Understands simple word problems in deciding whether to multiply or to divide.					
	PLACE VALUE					
20	Understands the concept of Place Value "units and tens/ hundreds.					
21	Able to explore groupings by ten.					
22	Identifies and writes place value of a digit.					
	TIME AND MONEY					
23	Tells time & reads to nearest minute.					
	Reads and tell time from analog/ digital clock					
24	Money: Counts money for shopping & calculations					
	FRACTION					
25	Recognizes basics of ½ or ¼ of a whole figure.					
	Understands the concept of half as ½ and quadrilateral					

	1/4 of quantity.					
26	Understands simple math (Fraction) stories.					
27	Matches the fraction ½ and ¼ with related figures.					
	BASIC SHAPES					
28	Recognizes shapes; circle, triangle, square.					
29	Identifies shapes (circle, square, triangle in daily routine.					
30	Able to trace numbers, shapes and pictures.					
31	Able to draw and color different shapes					
	MEASURMENT					
32	Shows an understanding about "big," "small," and "full"					
33	Compares lengths & weights					
34	Shows an understanding about the concept of Standard/ Non-standard unit					
35	Measures the objects/distance through standard and non-standard units					
	SOCIAL, EMOTIONAL DEVELOPMENT					
36	Listens carefully/ attentively					
37	Responds to verbal/oral questions.					
38	Follows the instruction.					
39	Seems confident while performing activities.					
40	Helps his/her classmates.					
41	Shows excitement and curiosity about new things in the classroom (e.g., a new book, story books and new math counters).					
42	Talks to peers and others politely.					
43	Expresses his/ her own likes and dislikes.					
44	Volunteers for classroom tasks (e.g., helping others, helping set up, cleaning up and passing out materials.					
45	Demonstrates skills of handling conflicting situations.					

General Comments:

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Signature of Teacher _____ **Signature & Seal of Head of School _____**

Grade Wise Foundational Literacy & Social-Emotional Skills Assessment Checklist – Summary

S#	Performance Statements	Name:					Name:					Name:					Name:					Name:				
		E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI
PHONEMIC AWARNESS																										
1	Hears and manipulates individual sounds (phonemes) in spoken words.																									
2	Blending Sounds: Blends separate sounds to form a word? For example, /c/ /a/ /t/ to make "cat."																									
3	Segmenting Words: Breaks a word into its individual sounds? For example, "dog" into /d/ /o/ /g/.																									
4	Manipulating Sounds: Adds, deletes, or substitutes sounds in words? For example, changing "cat" to "bat" by substituting /c/ with /b/.																									
PHONETICS																										
5	Understands the relationship between letters and their sounds.																									
6	Letter Sounds: Knows the sounds																									

	that each letter makes.																									
7	Decoding: Sounds out and reads simple words using their knowledge of letter-sound relationships.																									
8	Grapheme-Phoneme Correspondence: Understands how graphemes (letters or letter groups) represent phonemes (sounds).																									
FLUENCY																										
9	Able to read text accurately, quickly, and with proper expression.																									
10	Reading Speed: Reads at an appropriate pace for their age e.g. 60 words PM.																									
11	Accuracy: Reads words correctly without frequent mistakes.																									
12	Expression: Uses proper intonation and expression while reading aloud.																									
VOCABULARY																										
13	Understands and																									

	enjoys what is read. It's important for lifelong learning.																									
14	Word Meanings: Understands the meanings of words they encounter.																									
15	Context Usage: Uses new words correctly in different contexts.																									
16	New Words: Regularly learns and uses new words.																									
COMPREHENSION																										
17	Able to understand and interpret what is read.																									
18	Background Knowledge: Connects what they read to what they already know.																									
19	Verbal Reasoning: Understands metaphors, inferences, and other complex language structure**.**																									
20	Language Structures: Grasps the syntax and semantics of sentences they read.																									
SOCIO-EMOTIONAL SKILLS																										

21	Listens carefully/ attentively																									
22	Responds to verbal/oral questions.																									
23	Follows the instruction.																									
24	Seems confident while performing activities.																									
25	Helps his/her classmates.																									
26	Shows excitement and curiosity about new things in the classroom (e.g., a new book, story books and new math counters).																									
27	Talks to peers and others politely.																									
28	Shares his/her feelings in a range of contexts (e.g., through speaking, writing and drawing).																									
29	Expresses his/ her own likes and dislikes.																									
30	Offers encouraging comments to others																									
31	recognizes and accept the differences of other cultures/ethnicities.																									
32	identifies and																									

	follows bus, classroom and school safety rules.																									
33	recognizes that all people have similar needs.																									
34	practices saying “no” to protect one’s self from unsafe situations																									
35	explains how sharing with and supporting others may make them feel.																									

General Comments:

Signature of Teacher _____ Signature & Seal of Head of School _____

Grade Wise Foundational Literacy & Social-Emotional Skills Assessment Checklist – Summary

S #	Names of Students	Phonemic Awareness					Phonetics					Fluency					Vocabulary					Comprehension					Socio Emotional Skills				
		E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI
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35																														

General Comments:

Signature of Teacher _____ **Signature & Seal of Head of School** _____

Grade Wise Foundational Numeracy & Social-Emotional Skills Assessment Checklist – Summary

S#	Number /Number Operations	Name:					Name:					Name:					Name:					Name:				
1	Recognizes the numbers up to 9/99/999/9999.																									
2	Identifies the numbers up to 9/99/999/9999.																									
3	Recites ad read the numbers up to 9/99/999/9999.																									
4	Creates sequence number/patterns/objects.																									
5	Counts the objects and match with number card.																									
6	States the number that comes before any number, one to ten/ one to hundred on a number line.																									
7	Compares collections that have the same number of members.																									
	Addition/Subtraction																									
8	Understands the concept of Addition and Subtraction.																									
9	Finds the sum of the objects on two cards.																									
10	Adds objects from a set in preparation for addition.																									
11	Removes objects from a set in preparation for subtraction.																									
12	Uses manipulatives to find the sum for addition																									
13	Uses manipulatives to find the difference for																									

	subtraction.																									
14	Identifies the signs of "+" addition / "- "subtraction and "=" equal.																									
15	Understands simple word problems in deciding whether to add or to subtract.																									
Multiplication /Division																										
16	Understands the concept of multiplication/division.																									
17	Solves two- or three-digits numbers for multiplication/ division.																									
18	Identifies the sign of "x" (multiply) and "/" (division) sign.																									
19	Understands simple word problems in deciding whether to multiply or to divide.																									
Place Value																										
20	Understands the concept of Place Value "units and tens/ hundreds.																									
21	Able to explores groupings by ten.																									
22	Identifies and writes place value of a digit.																									
Time & Money																										
23	Tells time & reads to the nearest minute.																									
24	Money: Counts money for shopping & calculations																									
Fraction																										
25	Recognizes basics of ½ or ¼ of a whole figure.																									
26	Understands the concept of half as ½ and quadrilateral 1/4 of																									

	quantity.																								
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28	Matches the fraction ½ and ¼ with related figures.																								
Basic Shapes																									
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30	Identifies shapes (circle, square, triangle in daily routine																								
31	Able to trace numbers, shapes and pictures.																								
32	Able to draw and color different shapes																								
Measurement																									
33	Compares/demonstrates "big," "small," and "full"																								
34	Compares lengths/weights																								
35	Understands the concept of Standard/ Non-standard unit																								
36	Measures the objects/distance through standard and non-standard units																								
Socio Emotional Development																									
37	Listens carefully/ attentively																								
38	Responds to verbal/oral questions.																								
39	Follows the instruction.																								
40	Seems confident while performing activities																								
41	Helps his/her classmates.																								
42	Shows excitement and curiosity about new things in the classroom (e.g., a new book, story books and new math counters).																								
43	Talks to peers and others																								

	politely.																									
44	Expresses his/ her own likes and dislikes.																									
45	Volunteers for classroom tasks (e.g., helping others, helping set up, cleaning up and passing out materials.																									
46	Develops skills to resolve conflict situations.																									

General Comments:

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Signature of Teacher _____

Signature & Seal of Head of School _____

Grade Wise Foundational Numeracy & Social-Emotional Skills Assessment Checklist – Summary

S #	Names of Students	Number /Number operations					Addition /Subtraction					Multiplication /Division					Place Value					Time & Money					Fraction					Basic Shapes					Measurement					Socio Emotional Skills				
		E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI	E	VG	G	F	NI
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Sample: Foundational Social-Emotional Skills Observation Checklist

NAME OF STUDENT_____ Grade _____ DATE_____

S #	Statements	Yes	Up to some extent	No
	SOCIAL EMOTIONAL LEARNING: THE CHILD			
1	Listens carefully and attentively.			
2	Responds to verbal/oral questions.			
3	Follows the instruction.			
4	Seems confident while activities.			
5	Helps his/her classmates.			
6	Talks to peers and others politely.			
7	Shares his/her feelings in a range of contexts (e.g., through speaking, writing and drawing).			
8	Expresses his/ her own likes and dislikes.			
9	Shows excitement and curiosity about new things in the classroom (e.g., a new book, story books and new math counters).			
10	Identifies reliable adults who can help in an emergency.			
11	Exhibits persistence and creativity in seeking solutions to problems.			
12	Recognizes one's own abilities and accomplishments.			
13	Explains how sharing with and supporting others may make them feel.			
14	Recognizes that all people have similar needs.			
15	Recognizes and accept the differences of other cultures/ethnicities.			
16	Offers encouraging comments to others			
17	Practices saying "no" to protect one's self from unsafe situations			
18	Develops skills to resolve conflict situations.			
19	Identifies and follows bus, classroom and school safety rules.			
20	Volunteers for classroom tasks (e.g., helping others, helping set up, cleaning up and passing out materials.			

General Comments:

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Signature of Teacher _____ Signature & Seal of Head of School _____

What is Portfolio Assessment?

A portfolio assessment is a method of evaluation that uses a collection of student work to demonstrate their learning progress, skills, and achievements over time. Here's a breakdown of its key features:

- **Focus on Process and Product:** Unlike a single test, portfolios showcase a student's journey of learning. They include not just final products (like essays or projects) but also drafts, reflections, and self-assessments that reveal the development process.
- **Variety of Materials:** Portfolios can encompass a wide range of materials depending on the learning goals. This might include writings, artwork, presentations, lab reports, video clips, or even self-evaluations.
- **Student Selection:** In some cases, students have a role in choosing the pieces for their portfolio, allowing them to demonstrate their strengths and what they consider their most valuable learning experiences.
- **Reflection and Self-Assessment:** An important component of portfolio assessment is student reflection. Students might write about their learning process, challenges faced, and areas for improvement.

Types of Portfolio Assessments: There are two main types of portfolio assessments, each serving a different purpose:

- **Showcase Portfolios:** These focus on the final products, highlighting a student's best work and accomplishments at a particular point in time. They are often used for job applications, college admissions, or program completion.
- **Developmental Portfolios:** These portfolios aim to show growth over time. They include work from different stages of learning, allowing viewers to see how a student's skills and understanding have developed.

Benefits of Portfolio Assessments:

- **Rich picture of learning:** Portfolios provide a more comprehensive view of a student's learning than a single test score.
- **Encourages student reflection:** The process of creating a portfolio encourages students to reflect on their learning journey and identify areas of growth.
- **Promotes self-assessment skills:** Students develop the ability to evaluate their own work and set learning goals.
- **Provides evidence for improvement:** Portfolios offer concrete examples of a student's progress over time.

Challenges of Portfolio Assessments:

- **Time commitment:** Creating and evaluating portfolios can be time-consuming for both students and teachers.

- **Subjectivity:** The selection and evaluation of portfolio content can involve some subjectivity.
- **Standardization:** Ensuring consistency in the assessment process across different portfolios can be challenging.

Essential Elements of a Portfolio

- Cover page
- Drafts of child's work (Stories they have written, drawings, words they have learned, sketches and other samples of their work, numbers, maps they have drawn)
- Artefacts (photos, images, concept maps, etc.)
- A teacher's reflections

Activity # 3.6 Development of Assessment task of Foundational Literacy and Numeracy

INSTRUCTION:

1. Brainstorm the participants about the Assessment task development for Literacy and Numeracy write their responses on the board.
2. Share power point presentation of Sample Assessment Task development tables of Literacy and Numeracy.
3. Work in pairs and develop assessment task for foundational Literacy and Numeracy.
4. Share their pair work with whole class and review the assessment tasks of each other.

Handout 3.6

Development of Assessment Task for Foundational Literacy and Numeracy Skill

Sample Table for Assessment Task Development for Foundational Literacy

Task	Items	Details
Identify Primary symbols with sounds in English	w p b n t n f a z q d k a e i o u cat , rat, sat bed, ben, ten bin ,tin , tip top, mop, rod bug, run, mug	What is this task about? This task assesses a child's ability to map symbols with sounds. Why is this task important? The primary focus in the early years of schooling is on the learning of the primary symbols – the smallest unit of a language. Children are expected to master these symbols with sound. Note that even for the same language, items should be adapted as per the context(Sindhi, Urdu). The examples provided are from primary symbols in ECCE II. In English languages the primary symbols are letters, and in other languages syllables - which can be only three letters (a consonant, a vowel and a consonant), or a mix of vowels and consonants. Guidelines for item creation and adaptation The 8-10 primary symbols selected for inclusion should be commonly used. • Selection of letters should be based on their frequency of appearance in reading material commonly available for children (textbooks etc.) • Phonetically similar letters such as 's' and 'sh' should not be used in the same test sample. Assessor's instructions Point to any letter or syllable and read them aloud. Read any 5 letters or syllables. (If the child does not begin to choose, the assessor can choose the 5 letter/syllables for him or her) Guidelines for scoring the task The child gets full credit he or she recognizes at least 4 out of 5 letters or syllables

Table for Assessment Task Development for Foundational Literacy

Below is a blank grid for you to practice individually:

Task	Items	Details

Sample Table for Assessment Task Development for Foundational Numeracy

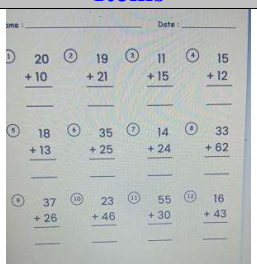
Task	Items	Details
Identifying and Add the 2-digit numbers		**What is this task about?** This task assesses a child's ability to identify and add 2-digit numbers. Often, in the early years of schooling for grade 2, the primary focus is on building children's number addition knowledge. Number knowledge involves multiple skills like naming, sequencing, comparison of numbers, addition administration and for what children are expected to do in school, the final form of the tool focused on number recognition and addition. To keep the administration process simple and to keep the tool progressive, only tasks related to addition have been included in the tool. **Why is the task important?** The ability to count fluently and flexibly are core numerical skills. 2 digit addition number knowledge enables children to Identification of written numerals for addition enables children to perform tasks with verbal, written and number symbols. **Guidelines for item creation and adaptation** ● Each sample should include 2 digit numbers addition from the 1-20 range. **Guidelines for scoring the task** The learner gets full credit if she or he does the following: ● Recognizes all numbers addition correctly

Table for Assessment Task Development for Foundational Numeracy

Below is a blank grid for you to practice individually:

Task	Items	Details

Sample Table for Assessment Task Development for Foundational Social-Emotional Skills

Task	Items	Details
Identify strategies to manage emotions and demonstrate empathy through short stories	• Story 1: A child loses a toy. • Story 2: A friend falls down and gets hurt. • Story 3: A child is scared on the first day of school. • Story 4: A friend shares a snack. • Story 5: A child feels frustrated during a puzzle game.	**What is this task about?** This task assesses a child's ability to recognize emotional challenges and suggest appropriate ways to manage emotions or show empathy. **Why is this task important?** Developing emotion regulation and empathy skills at an early age is critical for social integration, resilience, conflict resolution, and building positive peer relationships. **Guidelines for item creation and adaptation** - Select relatable, age-appropriate everyday situations. - Use simple, culturally relevant language. - Stories should be short (2-3 sentences) and easy to understand. - Include visual prompts or simple illustrations if available. **Assessor's instructions** Read each story aloud to the child. After each story, ask: "What can the child do to feel better?" or "How would you help your friend?" Encourage the child to explain their thinking in their own words. Prompt gently if the child struggles to respond. **Guidelines for scoring the task** The child gets full credit if they suggest an appropriate strategy or empathetic response in at least 4 out of 5 stories. Partial credit if 3 out of 5 responses are appropriate. Responses are considered appropriate if they reflect emotional understanding, supportive behavior, or a basic coping mechanism (e.g., "I would give a hug," "I would tell a teacher," "Take a deep breath," "Share my toys," etc.).

Table for Assessment Task Development for Foundational Social-Emotional Skills

Below is a blank grid for you to practice individually:

Task	Items	Details

SECTION II: LITERACY

Day 04

Activity # 4.2 List of Teaching Learning Materials to Facilitate ECCE& FL

INSTRUCTION:

1. Brainstorm the participants about Literacy,Numeracy, Socio-Emotional Learning, general Art & Craft, culturally relevant items and Additional Resources with the help of Flash cards and write responses on board.
2. Work in six groups on handout #4.2 and develop a poster presentation and display it on the wall of classroom for visit of other groups.
3. Develop manipulative activities of foundational learning with the help of FL Kit and share with all groups.

Handout # 4.2

List of Teaching Learning Materials to Facilitate ECCE & FL

Provision of a teaching kit with low-cost & high-quality materials for children enrolled in ECCE to grade 3 can significantly enhance teaching-learning experiences. Here are some context-relevant materials that can be included in the teaching kit for facilitating early grade literacy, numeracy, and socio-emotional learning in Sindh: The following materials are generally used during presentations, activities etc. The facilitators are encouraged to arrange the required material according to their sessions, activities, and presentations a day earlier.

S. #	Item	Item Description	Requirement for 01 Kit
A. Literacy			
1	Flashcards	Letters, words, and pictures to build vocabulary and phonics skills.	1 set
2	Letters, words, and pictures to build vocabulary and phonics skills.	Illustrated books in Sindhi, Urdu, and English to encourage reading habits	2 sets (each language)
3	Alphabet Charts	Large, colorful charts displaying alphabets.	3 (1 for each language)
4	Whiteboards & Markers **or** Blackboard & Chalk	For interactive writing activities.	1 board with 24 unites of W/B pens or chalks
5	Puppets	For storytelling and role-playing to develop listening and speaking skills.	6 pieces
6	Level Readers	Identifying reading levels within the concerned grade levels.	1 set of complete level set.

7	Sandpaper Letters	Sandpaper letters (small & capital) on cardboard or wood for sensory writing practice.	1 unit
B. Numeracy			
8	Counting Beads/Abacus	Teaching counting, addition, and subtraction.	1 unit
9	Number Charts	Displaying numbers with corresponding pictures to aid number recognition	3 different charts.(for numbers, shapes, time or sizes)
10	Shape Box	Teaching shapes, patterns, and basic geometry	1 unit or box
11	Dice and Dominoes	For number games and activities.	2 small and 2 big dice and 1 dominoes set
12	Math Storybooks & Big Books	Stories that incorporate mathematical concepts.	4 books
13	Sandpaper Numbers	Numbers cut out of sandpaper on colored boards for tactile learning.	1 unit
14	Counters	Small plastic /wooden/ iron/ stone pieces in any form like teddy bears, animals, cars	2 boxes/ units
15	Flashcards	Number, number in words & pictures to build 1:1 corresponding addition and subtraction skills	1 set
C. Socio-Emotional Learning			
16	Emotion Flashcards	Illustrations depicting emotions to help children express their feelings.	1 set of 6 basic emotions
17	Role-Playing Masks & Costumes	For role-playing social situations to build empathy.	3 sets of different costumes
18	Storybooks on Social Skills	Books that teach sharing, cooperation, and kindness.	3 books
19	Puzzle Games	Developing problem-solving skills and patience.	3 boxes of puzzles
20	Group Games (Indoor & outdoor)	Teamwork games like “ludo & snake and ladders”, "pass the ball" or "musical chairs".	1 unit of each mentioned.
D. General			
21	Drawing and Coloring Materials	Crayons, colored pencils, and drawing paper for creative expression.	24 boxes of Crayons, colored pencils and a rim for creative expression
22	Craft Supplies	Scissors, glue, and colored paper for art projects.	12 units of scissors, glue and a rim of colored paper for art.

23	Music Instruments	Simple instruments like tambourines, shakers, and bells to incorporate music into learning.	1 unit of each mentioned instrument
24	Reusable Worksheets	Laminated worksheets that can be written on and wiped clean.	24 laminated worksheets
25	Learning Posters	Posters on alphabets, numbers, seasons, animals, plants, etc.	I unit for each item
E. Culturally Relevant Items			
26	Local Cultural Stories & Songs	Traditional Sindhi and Urdu folktales and songs to connect with local culture.	6 books for each of the language
27	Traditional Games	Introducing local games for more engaging learning.	NA
F. Additional Resources			
28	Teacher's Guidebook	Teacher Training Manual with activities and scripted lesson plans for ECCE to Grade 3.	1 teacher guide
29	Parent Engagement Materials	Simple guides and short storybooks for parents to support learning at home.	48 story books and 6 simple guides for parents
30	Iron Container/Cupboard	Storage (iron cupboard) for safely keeping teaching materials.	1 cupboard/ container

Activity # 4.3: Listening & Speaking Skills Development for Foundational Literacy

INSTRUCTION:

1. Brainstorm the participants about the topic and write responses on board.
2. Work in groups read and discuss handout 4.3A ,write key findings for deep understanding and share with whole class.

3.Work in same groups and assign the handout 4.3B,Paste the chart sheets on the different walls with the following tags

Tag#1: Definition of Listening and Speaking

Tag#2: Importance of Listening & Speaking

Tag#3: Listening & Speaking at Home

Tag#4: Listening & Speaking at School

4.Refer the handout and write a single sentence or phrase on the tagged chart sheets accordingly.

5. move around and comment on the all charts don't repeat the comments tags on the charts

Handout # 4.3 A

Introduction of Foundational Literacy

Foundational learning is defined as basic literacy, numeracy, and transferable skills such as socio-emotional skills that provide the fundamental building blocks for all other learning, knowledge, and higher-order skills (Global Coalition for Foundational Learning 2022). Both foundational literacy and numeracy are essential for personal, academic, and professional success and include achieving some basic competencies that are critical for achieving later outcomes. It is important to understand these concepts explicitly:

Definition of Foundational Literacy

a) Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society (UNESCO, Institute for Statistics).

b) Literacy includes the capacity to read, understand and critically appreciate various forms of communication including spoken language, printed text, broadcast media, and digital media (Dublin: Department of Education and Skills [DES] 2011, p.8)

Handout # 4.3 B

Listening & Speaking Skills Development for Foundational Literacy

What are speaking and listening in Literacy?

Speaking and listening are important literacy skills that will create the foundation for much of your children's future learning. Listening requires the fundamental skill of focusing attention on the speaker to hear and understand what the speaker is saying. Speaking skills require children to take turns, speak confidently, stay on topic, and speak with clarity. Speaking and listening skills are the behaviors and actions used to communicate effectively and considerately in the learning environment. Here are a few examples of speaking and listening skills:

Listening:

- Looking at the speaker while they are talking.
- Make appropriate gestures and movements to acknowledge what the speaker is saying (nodding and making appropriate comments).
- Raising your hand before speaking to ask a question.
- Letting the speaker finish talking without interruptions.

Speaking:

- Using 'inside voices' and speaking at an appropriate volume for the situation.
- Being able to ask related and appropriate questions.
- Using an appropriate cadence, pauses and speed that matches what's being said.
- Using appropriate vocabulary and grammar.

Listening and Speaking Skills in the Early Years for Developing Foundational Literacy

A child's experiences in their early years of life are of huge importance as they lay the foundations for effective future learning and positive social development. During this time a child's brain develops faster than at any other point. Children are like sponges, absorbing information at an astonishing rate.

Importance Listening and Speaking Skills in the Early Years

From the beginning, effective communication skills are the cornerstone of phonics development (which underpins reading and writing) and the key to healthy social and emotional development. As children learn to express their needs and feelings through speech, they also develop empathy, active listening, and the ability to build relationships. They are also closely tied to future academic success. Children who have a rich vocabulary and strong listening skills are better equipped to grasp complex instructions, understand concepts, and communicate effectively.

Furthermore, they go hand in hand with critical thinking. When children talk, ask questions, and respond to others, they learn to think critically and form logical arguments, skills crucial for problem-solving, decision-making, and successful lifelong learning.

Why are the Early Years key of Learning?

Next, between 3 to 8 years, a young child's language skills become increasingly refined, and vocabulary expands further, with them mastering more complex sentence structures. They develop the ability to recount past events, use a range of tenses and use talk to explain what is happening. They also begin to develop a growing awareness of letter sounds, basic reading comprehension. Listening skills also develop hand in hand with speaking abilities.

How can we help both at home and school?

Create a Language Rich Environment:

The key is to surround children with words and language from an early age. We should talk to them about everyday activities, point things out, and describe what we are doing, whilst fostering their curiosity by encouraging them to ask questions and supporting them to share their thoughts, feelings, and experiences.

Read Lots of Stories:

Not only do children love having stories read to them but reading aloud to children captivates their imagination. Their listening comprehension increases if you can ask them questions, or to make predictions, and by getting them to retell the stories in their own words. Incorporating small world characters and puppets adds additional excitement.

Introduce Audiobooks:

Introducing children to age-appropriate audiobooks helps their listening skills which are the foundation of reading comprehension. When children actively listen to stories or conversations, it helps them to understand the meaning behind words, and it nurtures a love of books.

Play Rhyming Games:

Playing rhyming games, singing nursery rhymes and simple songs with young children helps them recognize and consolidate sounds through the rhythm and repetition in these activities.

Play Other Games:

Make good use of a car journey by playing games that involve listening and speaking such as I Spy and Simon Says. Board games further develop these skills and a child's ability to hear individual sounds in words.

Visit Lots of Different Places:

Take advantage of outdoor environments to engage children in sensory-rich experiences and have spontaneous conversations with them about what they can see and feel as this will expand their vocabulary. Take trips to the woods, parks and the beach. Museums and art galleries provide excellent indoor adventures.

Facilitate Role-Play:

Children love role-play and all we need to do is provide them with the opportunities and resources. Whether pretending to be a shopkeeper, firefighter or astronaut, children engage in conversations, negotiate roles, and problem-solve whilst using descriptive language and often expressing emotions.

Provide opportunities for Show-and-Tell:

Children love talking about their interests, experiences, and achievements. Show and tell opportunities foster confidence and public speaking skills (an important life skill for the future). Encourage children to be active listeners by asking questions, offering feedback, and valuing each other's contributions.

Be a Role Model:

Children often imitate our behavior, so it is important to model effective communication by speaking clearly and listening actively when a child talks.

Limit Screen Time:

Excessive screen time can hinder the development of speaking and listening skills. Setting reasonable limits on television and device usage whilst balancing this with real-life interactions and activities will benefit the children enormously.

As parents and teachers, we play a key role in nurturing speaking and listening skills. Time spent on activities such as those above, will establish a lifelong love of learning and literacy. By prioritizing the development of speaking and listening skills in the Early Years and providing ample opportunities for practice and growth, we can empower children to become confident communicators, critical thinkers, and lifelong learners, setting them on a path to effective learning and a happy and successful future life well beyond their school days.

Source: https://www.reigatestmarys.org/blog/2024/04/25/the-importance-of-developing-speaking-and-listening-skills-in-the-early-years/

Activity # 4.4: Teaching Learning Strategies for Listening & Speaking Skills Development (ECCE&Grade-1) supported with Socio-Emotional Skills

INSTRUCTION:

1.Work in small groups read and discuss handout 4.4 ,prepare and perform the teaching learning strategies of listening and speaking for ECCE to grade 1given in the handout with links.

Handout # 4.4

Teaching Learning Strategies for Listening & Speaking Skills Development (ECCE & Grade-1) supported with Socio-Emotional Skills

A. Teaching Learning Strategies for Listening & Speaking Skills development for ECCE

When designing listening and speaking activities for Early Childhood Care and Education (ECCE), it's crucial to make them engaging, interactive, and age-appropriate. Here's a breakdown of effective activities:

Listening Activities:

- **Sound Recognition:**
  - Play recordings of various sounds (animal noises, household sounds, nature sounds) and ask children to identify them.
  - "What's that sound?" games. https://youtu.be/n1m4h79JZso?si=gF3YOAuZREyOygtS
- **Following Simple Directions:**
  - Give one or two-step instructions (e.g., "Touch your nose, then clap your hands").
  - "Simon Says" is a classic example. https://youtu.be/AJdevEoiaw?si=IlCX87tC4AYPZmXJ
- **Story Time:**
  - Read stories aloud and ask simple comprehension questions.
  - Encourage children to listen for specific words or phrases. https://youtu.be/-MAx1wyQIxI?si=1EY0zKlDxddKKue5
- **Musical Activities:**
  - Play music and ask children to listen for different instruments or changes in tempo.
  - "Musical statues" helps develop listening skills and self-control. https://youtu.be/QhBySqvm7_Q?si=P9KA7fAKo3VL0GEG
- **Listening Games:**
  - "Sound bingo": Create bingo cards with pictures of different sounds and have children mark them as they hear the corresponding sound.
  - "What is missing?" Place several items on a tray, let the children look at them, then cover the tray and remove one item. The children have to guess what is missing.
  - https://youtu.be/L_u7o2Zuzx8?si=mO1un9nR5TRy_AsT

Speaking Activities:

- **Show and Tell:**
  - Encourage children to bring in an object from home and talk about it.

    - https://youtu.be/Kfsydwpaalo?si=0Ha6639dEJL3E_hK
- **Storytelling and Retelling:**
    - Ask children to retell familiar stories or create their own.
    - Use picture prompts to stimulate storytelling.
    - https://youtu.be/cYUrUqz6RNo?si=m9cQFgTcyZ36hFIV
- **Role-Playing:**
    - Provide opportunities for children to act out different roles and scenarios.
    - Use puppets or props to enhance role-playing.
    - https://youtu.be/XTRyzTAip8A?si=XTBs10uIwPJDbAnh
- **Circle Time:**
    - Facilitate discussions on various topics, encouraging children to share their thoughts and ideas.
    - "Sharing time" where children can talk about their day or experiences. https://youtu.be/Di2kM9J5Wo0?si=B0rbyq4wvheMxqMC
- **Singing Songs and Rhymes:**
    - Encourage children to sing along to familiar songs and recite rhymes.
    - This helps with vocabulary development and pronunciation. https://youtu.be/MTLKr-8UDYE?si=SbLp-75K7VQp3lnp
- **Conversation Starters:**
    - Use open ended questions to encourage conversation.
    - For example, "What is your favorite animal and why?" or "what did you do today?" https://youtu.be/by1QAoRcc-U?si=lZpbl4YH8v6PBUcH

B. Teaching Learning Strategies for Listening & Speaking Skills development for Grade 1

Developing listening and speaking skills in first-grade students requires engaging, interactive, and age-appropriate strategies. Here's a breakdown of effective teaching and learning strategies: following link can help you for these activities.
https://www.education.com/resources/grade-1/games/

Strategies for Developing Listening Skills:

- **Create an Active Listening Environment:**
    - Minimize distractions in the classroom.
    - Establish clear listening expectations.
    - Model active listening by making eye contact and showing attentiveness.
- **Use Storytelling and Read-Aloud:**
    - Read stories aloud with expressive voices and varied intonations.
    - Ask simple comprehension questions during and after the story.
    - Encourage children to retell parts of the story in their own words.
- **Incorporate Listening Games:**
    - "Simon Says": This classic game reinforces listening and following directions.
    - "Sound Bingo": Use recordings of various sounds and have children identify them.

    - "I Spy": Adapt "I Spy" to focus on auditory clues (e.g., "I spy something that makes a 'buzzing' sound").
- **Give Clear and Simple Instructions:**
    - Use short, concise sentences.
    - Break down multi-step instructions into smaller parts.
    - Use visual aids to support verbal instructions.
- **Practice Following Directions:**
    - Give students simple tasks that require them to listen carefully and follow directions.
    - For example, "Draw a circle, then put a square inside the circle."

Strategies for Developing Speaking Skills:

- **Create a Safe and Supportive Environment:**
    - Encourage all students to participate, regardless of their confidence level.
    - Provide positive reinforcement and avoid criticizing mistakes.
    - Foster a classroom culture where students feel comfortable expressing themselves.
- **Promote Oral Language Activities:**
    - "Show and Tell": This allows students to share personal experiences and practice speaking in front of the class.
    - Circle time: Facilitate discussions on various topics and encourage students to share their thoughts.
    - Role-playing: Provide opportunities for students to act out different scenarios and practice using language in context.
- **Encourage Conversations:**
    - Facilitate pair and group discussions.
    - Use open-ended questions to encourage students to elaborate on their answers.
    - Teach students how to take turns and listen to each other.
- **Use Songs, Rhymes, and Chants:**
    - These activities help students develop pronunciation, fluency, and vocabulary.
    - Encourage students to sing and recite rhymes together.
- **Vocabulary Building:**
    - Introduce new vocabulary words in context.
    - Use visual aids and real-life examples to illustrate word meanings.
    - Play vocabulary games to reinforce learning.

Activity # 4.5: Teaching Learning Strategies for Listening & Speaking Skills Development (Grade 2&Grade-3) supported with Socio-Emotional Skills

INSTRUCTION:

Work in small groups read and discuss handout 4.4 ,prepare and perform the teaching learning strategies of listening and speaking for Grade 2 to grade 3given in the handout with links.

Handout # 4.5

Teaching Learning Strategies for Listening & Speaking Skills Development (Grade -2 & Grade-3) supported with Socio-Emotional Skills

A. Teaching Learning Strategies for Listening & Speaking Skills development for Grade 2:

When teaching listening and speaking skills to second-grade students, it's essential to build upon the foundational skills developed in earlier grades. Here's a breakdown of effective teaching and learning strategies tailored for this age group:

Strategies for Enhancing Listening Skills:

- **Active Listening Practice:**
  - Emphasize the importance of eye contact, body language, and thoughtful responses.
  - Use "think-pair-share" activities to encourage students to process and discuss what they've heard.
  - Introduce activities that require students to listen for specific information, such as listening to a short story and then answering detailed questions.
- **Following Multi-Step Directions:**
  - Gradually increase the complexity of instructions.
  - Use visual aids to support verbal directions.
  - Play games like "complex Simon Says" that require students to follow a series of actions.
- **Listening to and Analyzing Stories:**
  - Read aloud a variety of genres, including fiction, non-fiction, and poetry.
  - Discuss character motivations, plot developments, and themes.
  - Introduce activities that require students to make inferences and draw conclusions based on what they've heard.
- **Listening for a Purpose:**
  - Have students listen to informational texts and then summarize the main ideas.
  - Introduce listening to audio recordings of things such as simple news reports, or educational recordings.
  - Practice listening to others during peer discussions, and then have the students give feedback to each other.

Strategies for Enhancing Speaking Skills:

- **Encouraging Detailed Responses:**
  - Prompt students to elaborate on their answers by asking open-ended questions.
  - Model the use of descriptive language and complete sentences.

    - Provide opportunities for students to share their opinions and ideas in a structured setting.
- **Developing Oral Presentation Skills:**
    - Begin with short, informal presentations, such as sharing a favorite book or describing a personal experience.
    - Gradually introduce more formal presentations, such as giving a brief report on a research topic.
    - Teach students how to use visual aids and maintain eye contact.
- **Promoting Collaborative Discussions:**
    - Facilitate group discussions on a variety of topics.
    - Teach students how to take turns, listen to others, and respectfully disagree.
    - Use discussion prompts and sentence starters to support student participation.
- **Expanding Vocabulary and Language Use:**
    - Introduce new vocabulary words in context and provide opportunities for students to use them in their speaking.
    - Encourage students to use varied sentence structures and descriptive language.
    - Play word games and engage in storytelling activities to enhance language development.
- **Role-Playing and Drama:**
    - Allowing students to act out different scenarios helps them practice speaking in different contexts.
    - Using puppets, or creating simple plays can increase student involvement.

B. Teaching Learning Strategies for Listening & Speaking Skills development for Grade 3:

Designing teaching learning strategies for third-grade students, the focus shifts to more complex listening and speaking tasks, encouraging critical thinking and clear communication. Here's a breakdown of effective teaching and learning strategies:

Enhancing Listening Skills:

- **Listening for Main Ideas and Details:**
    - Introduce activities where students listen to informational texts and identify the main idea and supporting details.
    - Use graphic organizers to help students organize their thoughts.
    - Practice listening to and summarizing short audio clips or podcasts.
- **Developing Critical Listening:**
    - Introduce the concept of fact versus opinion.
    - Have students listen to debates or discussions and identify different perspectives.
    - Encourage students to ask clarifying questions.

- **Following Multi-Step Instructions and Procedures:**
    - Provide instructions for more complex tasks, such as science experiments or art projects.
    - Have students listen to and follow directions for playing new games.
    - Practice listening to and understanding sequential information.
- **Listening to various media:**
    - Have students listen to age-appropriate news reports, and then discuss what they heard.
    - Utilize audio books, and then have discussions about the books.

Enhancing Speaking Skills:

- **Developing Oral Presentation Skills:**
    - Encourage students to prepare and deliver short presentations on topics of interest.
    - Teach students how to organize their thoughts, use visual aids, and speak clearly.
    - Provide opportunities for students to practice public speaking in a supportive environment.
- **Participating in Group Discussions:**
    - Facilitate discussions on a variety of topics, encouraging students to share their opinions and ideas.
    - Teach students how to respectfully disagree and build upon the ideas of others.
    - Introduce structured discussions, such as Socratic seminars.
- **Expanding Vocabulary and Language Use:**
    - Introduce new vocabulary words in context and provide opportunities for students to use them in their speaking.
    - Encourage students to use descriptive language and varied sentence structures.
    - Play word games and engage in storytelling activities to enhance language development.
- **Storytelling and Retelling with Detail:**
    - Have students retell stories with increased detail, including character descriptions and plot points.
    - Encourage creative storytelling, having the students create their own stories, and present them to the class.
- **Debate introduction:**
    - Introduce very simple forms of debate, where the students can present their opinions on topics, and back them up with simple reasons.

Activity 4.6: Development of Foundational Listening & Speaking Activities Supported with Socio-Emotional Skills focusing to Monograde & Multi-grade Classrooms.

INSTRUCTION:

Work in groups on Handouts 4.6A&4.6B for activity designing for mono grade and multigrade classrooms ,prepare and perform the teaching learning strategies of listening and speaking and share with whole class.

Handout # 4.6 A

Activity Development Sheet for Monograde classroom

1. Activity Title: _____

2. Grade: _____

3. Learning Skill (listening, Speaking, Reading, Writing):_____

4. Learning ELO/SLO/Objectives: Students will be able to:

i_____

ii_____

5. Materials: _____

6. Procedure/Instructions: (Provide step-by-step instructions for the activity.)

---

7. **Assessment:** Include methods such as observation, Check list worksheets and align assessment with ELO/SLO/Learning Objectives

---

_____

Handout # 4.6 B

Activity Development Sheet for Multi Grade Classroom

1. Activity Title (Theme):----------

2. Grades (ECCE, Grade 1-3):_____

3. Learning Skill (listening, Speaking, Reading, Writing):_____

4. Learning ELO/SLO/Objectives: Students will be able to:

ECCE: _____

Grade 1:_____

Grade 2:_____

Grade 3:_____

5. Materials: List all materials needed, considering the diverse needs of each grade (ECCE, Grade 1-3)

_____

6. Procedure/Instructions: (Provide step-by-step instructions for the activity.)

Introduction to Theme:

Grade Level Activities:

ECCE: _____

Grade 1:_____

Grade 2:_____

Grade 3:_____

Group Sharing:

---

7. Differentiation: Instructions to overcome multi-grade activities:

A. Outline specific strategies for differentiating instruction to meet the needs of all learners.

_____

B. Provide tiered activities, flexible grouping, and varied assessment methods and provide older students to help younger students.

_____

C. For younger students: provide picture prompts and simplified vocabulary and For older students: encourage independent research and critical thinking.

_____

8. Assessment: Describe how student learning will be assessed, using a variety of methods for different grades.

_____

9. Closure of the Theme:

_____

Day 05

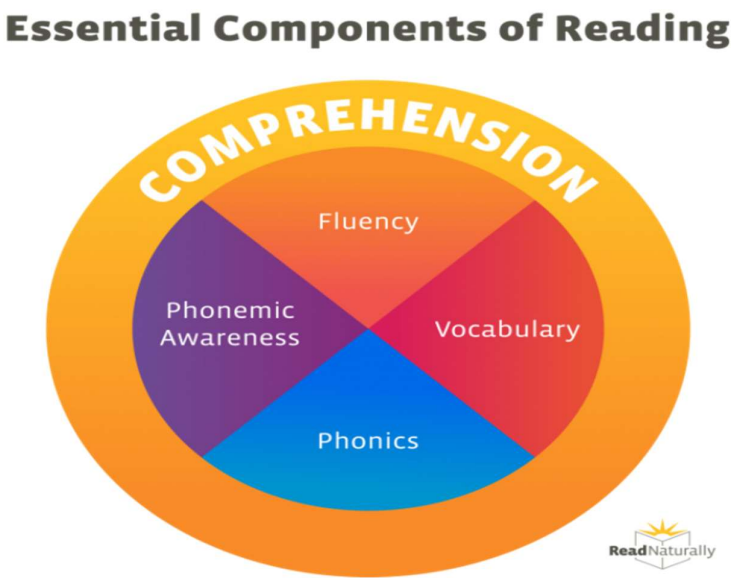
Activity 5.2:Foundational Reading Skill (Literacy) and its Components

INSTRUCTION:

Work in groups on Handout 5.2 according to assigned topics on given flash cards .prepare a poster presentation and present infront of whole class interactively.

Handout # 5.2

Essential Components of Foundational Reading Skill (Literacy)



There are five (5) essential components of reading—phonemic awareness, phonics, fluency, vocabulary, and comprehension.

1. Phonemic Awareness

Phonemes, the smallest units making up spoken language, combine to form syllables and words. Phonemic awareness refers to the student's ability to focus on and manipulate these phonemes in spoken syllables and words. According to the National Reading Panel, teaching phonemic awareness to children significantly improves their reading more than instruction that lacks any attention to phonemic awareness.

2. Phonics

Phonics is the relationship between the letters (or letter combinations) in written language and the individual sounds in spoken language. Phonics instruction teaches students how to use these relationships to read and spell words. The National Reading Panel indicated that systematic phonics instruction enhances children's success in learning to read, and it is significantly more effective than instruction that teaches little or no phonics.

3. Fluency

Fluent readers are able to read orally with appropriate speed, accuracy, and proper expression. Fluency is the ability to read as well as we speak and to make sense of the text without having to stop and decode each word. The National Reading Panel's research findings concluded that guided oral reading and repeated oral reading had a significant and positive impact on word recognition, reading fluency, and comprehension in students of all ages.

4. Vocabulary

Vocabulary development is closely connected to comprehension. The larger the reader's vocabulary (either oral or print), the easier it is to make sense of the text. According to the National Reading Panel, vocabulary can be learned incidentally through storybook reading or

listening to others, and vocabulary should be taught both directly and indirectly. Students should be actively engaged in instruction that includes learning words before reading, repetition and multiple exposures, learning in rich contexts, incidental learning, and use of computer technology.

5. Comprehension

Comprehension is the complex cognitive process readers use to understand what they have read. Vocabulary development and instruction play a critical role in comprehension. The National Reading Panel determined that young readers develop text comprehension through a variety of techniques, including answering questions (quizzes) and summarization (retelling the story).

Source: https://www.readnaturally.com/research/5-components-of reading#:~:text= In%20accordance%20with%20 our%20commitment, fluency%2C%20vocabulary%2C%20and%20comprehension

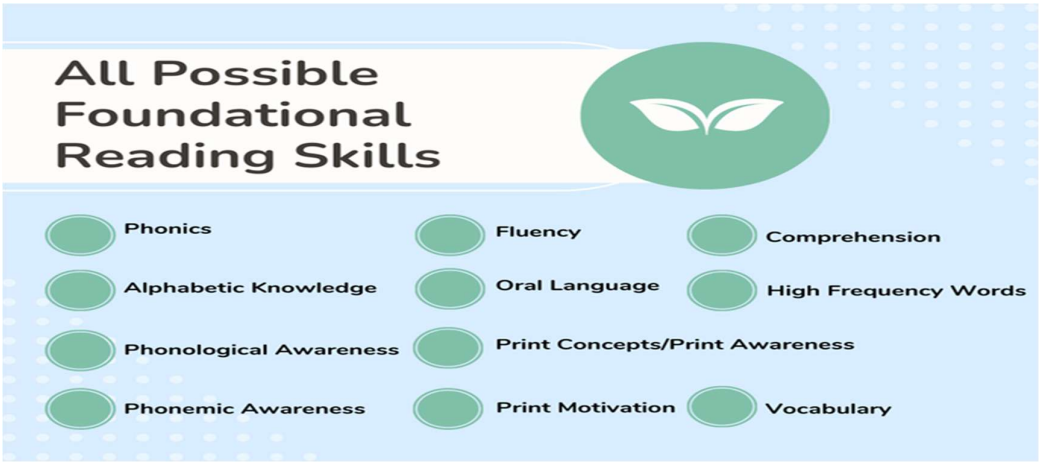
Activity 5.3: Essential Foundational Reading Skills for ECCE to Grade 1-3

INSTRUCTION:

Brainstorm and Work in groups on Handout 5.3 according to assigned topics on given flash cards .prepare a pictorial presentation and present in front of whole class interactively.

Handout # 5.3

Foundational Reading Skills



Phonics: Phonics is the understanding that there is a predictable relationship between phonemes (sounds) and graphemes (letters and letter combinations). It involves decoding words by connecting sounds to their corresponding letters or letter patterns. Understanding phonics enables children to understand the relationships between the letters of written language and the sounds of spoken language. Phonics supports children to decode unfamiliar words, leading to improved reading fluency and comprehension

Phonemic Awareness: Phonemic awareness refers to the ability to identify and manipulate individual sounds (phonemes) in spoken words. It is a specific aspect of phonological awareness that focuses solely on individual phonemes. It involves recognizing and manipulating phonemes through activities like segmenting, blending, and manipulating sounds. Phonemic awareness plays a crucial role in early literacy development and has been identified as a strong predictor of reading success.

Phonological Awareness: Phonological awareness is a broad term that encompasses the understanding and recognition of various units of sound in spoken language. It involves the understanding and manipulation of larger units of sound in spoken language, including syllables, onset and rime, and individual phonemes. It includes skills such as rhyming, segmenting and blending sounds, and manipulating sounds within words. Developing phonological awareness skills facilitates phonemic awareness, phonics, and reading fluency.

Vocabulary: Vocabulary refers to the words known and understood by a child. A robust vocabulary enables children to comprehend written text and express themselves effectively. Vocabulary contributes to reading comprehension and overall language development. Numerous studies have established a positive relationship between vocabulary knowledge and reading comprehension.

Fluency: Fluency encompasses the ability to read text accurately, quickly, and with appropriate expression. Fluent readers read effortlessly, allowing them to focus on understanding the meaning of the text. Fluency enables readers to process text effortlessly, leading to improved comprehension and overall reading proficiency.

Comprehension: Comprehension is the ultimate goal of reading. It involves understanding and making meaning from the text. Comprehension skills include activating prior knowledge, making predictions, identifying main ideas, making inferences, and summarizing. Developing comprehension skills enables children to engage with and critically analyze texts, enhancing their overall reading proficiency.

Print Concepts/ Print Awareness: Print concepts refer to the understanding of how print works, including concepts such as left-to-right and top-to-bottom directionality, word spacing, and punctuation. Developing print concepts helps children navigate written text and understand the structure and organization of written language. Print concepts provide children with a framework for understanding the structure and organization of written language.

Alphabetic Knowledge: Alphabetic knowledge refers to the understanding that letters represent sounds. It involves recognizing and naming uppercase and lowercase letters and understanding their corresponding sounds. By mastering alphabetic knowledge, children can effectively decode and encode words, laying the foundation for reading success.

High Frequency Words: High frequency words are words that appear frequently in written text. Mastery of high frequency words is important because these words are encountered most often in the text and play a significant role in reading fluency and comprehension. Recognizing high frequency words quickly and automatically enhances reading efficiency and allows readers to focus on decoding more complex words.

Oral Language: Oral language refers to the ability to understand and use spoken language effectively. It includes a host of skills, such as vocabulary, sentence structures, grammar, listening skills, oral fluency, verbal reasoning, etc. Strong oral language skills serve as the foundation for reading and writing. Children with a rich oral language background have a better understanding of vocabulary, sentence structures, and grammar, which aids in reading comprehension. Moreover, oral language skills support phonemic awareness and phonics development by exposing children to a variety of sounds and word patterns. .

Print Motivation: Print motivation refers to a child's interest, motivation, and enjoyment of books and reading. By nurturing print motivation, individuals develop a lifelong love for reading and are more likely to become proficient readers. Print motivation plays a significant role in fostering a positive attitude towards reading and a genuine desire to engage with printed material.

Using a Framework That Considers All of the Foundational Reading Skills:

By understanding the foundational reading skills, schools, organizations and educators can devise a comprehensive reading strategy that focuses on each learning area. Such deliberate inclusion of all the foundational reading skill sets ensures students will become proficient readers! By implementing an explicit and systematic reading approach and developing an appropriate assessment strategy for each skill, educators can effectively provide targeted support and interventions to struggling readers who need the additional help beyond core instruction.

Source: https://www.spriglearning.com/foundational-reading-skills-their-meaning-and-value-in-evidence-based-literacy/

Activity 5.4: Reading Strategies For Reading in the Classroom

INSTRUCTION:

Brainstorm and Work in groups on Handout 5.4 ,Read and discussreading strategies .prepare a Hans-on presentation in front of whole class interactively.

Handout # 5.4

Reading Strategies for Reading in the Classroom

Reading strategies are teaching methods and activities that teachers and parents can use with their children to help develop language and reading skills. Strategies that improve decoding and reading comprehension skills benefit every student, but are essential for beginning readers, struggling readers, and English Language Learners.

There are many different reading strategies that you can apply to your reading sessions in the classroom. To improve reading comprehension teachers can introduce the 7 cognitive reading strategies for effective readers, which are as follows

1. Keep a sharp eye on visual clues: Readers use the clues from the text to create a picture in their head. They use all their senses and imagination to create their mental image. Encourage your students to take a look at any visual clues in the text to see if they give you any clues that will help them to decode the text.

2. Sound it out: If your children are struggling with a particular word, break it down phonetically and say each sound separately aloud. This should help them piece together tricky words and understand how sounds interact. (Remember to look for diagraphs and trigraphs as you read.)

3. Summarizing: Summarizing allows the reader to digest small snippets of information in a simple structure. This means that they're able to understand the basics of the text without needing to read it all. Using summaries as a reading strategy can help children identify key information and phrases in a text.

4. Ask questions: Readers should learn to ask and answer questions to clarify meaning and ensure they understand what they have read. To help this reading strategy, encourage children to ask questions before, during and after reading.

5. Make predictions: Readers use written and visual clues from the text as well as their own person experiences to make predictions about what might happen before, during and after reading. Using this strategy in reading helps children become more confident in understanding key features of a story and piece together clues in writing.

6. Story Mapping: Story mapping is a great reading strategy that teachers and parents can use when working with fictional texts. This strategy uses templates such as this Story Mapping Boxes Worksheet to create a visual 'map' of the story plot, characters, setting and themes.

7. Comprehension monitoring: Comprehension monitoring is a form of metacognition. This strategy involves the ability of readers to know when they understand what they read, when they do not understand, and to use appropriate strategies to improve their understanding when it is blocked.

Activity 5.5: Tips to improve Reading Skills with Socio Emotional Skills

INSTRUCTION:

1.Work in groups on Handout 5.5 ,Read and discuss reading improvement strategies .

2.Click on the given link in handout and prepare a Hans-on presentation in front of whole class interactively.

Handout # 5.5

Tips to Improve Reading Skill supported with Socio Emotional Skills

Here are some simple and effective tips and ways to help students build reading skills to better understand classroom learning.

1. Personalize reading materials: Students can increase their understanding by seeing how the material connects with their life. Have your students make personal connections with the text by writing it down on the page. You can also help students comprehend the text by helping them see an association with current events.

2. Problem-solving perfection: Blend real-world problem-solving skills into your curriculum. Have your students write out solutions to the problem and discuss their ideas as a class or in small groups.

3. Engage all five senses for different types of learner: Add in activities that reinforce learning and comprehension by using more senses as they read. Remind students to read with a pen or pencil to annotate the text. Have your students take turns reading out loud. Use projectors to guide your lesson and write down questions for those who are visual learners.

4. Set reading goals to motivate students: Have each student set their own reading goals. This can help them take action in building reading skills and students will be more mindful of how they are improving.

5. Try student led reading activities: Your students process reading material and curriculum in very different ways. As you implement reading activities to help your class learn complex materials, you will learn what works best for each student individually.

6. Revisit and reread confusing sentences and texts: Revisiting the parts that were confusing for your child (or that might simply need a quick refresher) can help your child gain a more complete picture of what he or she is learning. This also helps ensure your child is able to understand upcoming material in the text. You can also keep a record or list of words that your students are unfamiliar or struggling with. You can then encourage your child to look these words up in a dictionary to learn what they mean. Then, find ways to use them in a sentence that your child can write themselves.

7. Talk it out: When your child has finished reading, talk about what he or she just read together. Ask your child what he or she learned and his or her thoughts. For longer reading materials, like novels for book reports, make discussion questions you and your child can talk about together after each reading session.

8. Breakdown reading: Long, complex reading can be more digestible by breaking it up into pieces. Shorter segments will help students retain the information as the class discusses the materials. It can also help students build confidence in understanding a complex subject. When teaching how to improve reading in short bursts, why not check out our 60-second read packs that offer short and manageable reading materials to build reading skills. Our60-Second reads to help your primary students practice their fluency and comprehension on a daily basis. With only 90-120 words and four short comprehension questions, this is the perfect way to dramatically improve English fluency.

https://www.twinkl.com.pk/teaching-wiki/reading-skills

Remember!
These useful reading strategies include:
using picture clues,
saying the first sound in a word,
blending the sounds in a word,
thinking about similar words,
spotting any common exception words,
looking for smaller words within a longer word,
splitting the word into chunks,
reading onto the end of a sentence and coming back to the word

9. Story Telling/ Rhyme/ Role Play

Teacher will start with nursery rhyme. (Any poem related to theme would do)

Birds Flying
Up, up in the sky, the little birds fly
(Fingers flying like birds)

Down, down in the nest, the little birds rest
(Hands form nest)

With a wing on the left, and a wing on the right
(Hands on each hip)

Let the little birds rest all the long night.
(Head to one side like tucking under wing)

Day 06

Activity 6.2: Introduction to Foundational Writing Skill (Literacy)

INSTRUCTION:

1. Distribute to two colors (pink and yellow) of flash cards to each participant. Pink one for writing 'truth' and yellow one to write' lie' about your writing skills.
2. Work in pairs on Handout 6.2 ,Read ,discuss and make a list of different strategies of writhing skill used in classrooms.exchange your list of strategies with each other interactively and paste it on the wall of classroom.

Handout # 6.2

Introduction to Foundational Writing Skill (Literacy)

Writing skills in early grades builds a strong foundation in literacy. Students need to learn foundational writing skills so that they can focus more on developing and communicating ideas in their writing. Handwriting, spelling, sentence construction, typing, and word processing should become effortless as students move to middle and upper elementary school.

https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/wwc_writing_pg_fs.pdf

Writing builds on many early-developing skills, including conceptual knowledge of print, Phonological Processing, and Handwriting Skills. Once these emergent skills are solidified, learners can begin to focus on higher level procedural skills including punctuation, capitalization, spelling, and writing speed.

https://lvp.digitalpromiseglobal.org/content-area/literacy-4-6/factors/foundational-writing-skills-literacy

Early Writing skill Development is a complex task that requires the integration of multiple skills (Cabell et al., 2022). When young children write, they draw on language skills to generate the words they want to use in their messages, attend to print concepts (e.g., recognizing print has meaning), and letter forms as they put crayon to paper to construct letters, and access their knowledge of letter sounds as they use estimated spelling skills (Rowe & Wilson, 2015). Conceptualizing early writing as children's attempts to communicate through print, we recognize early writing begins with a range of marks children make (e.g., scribbles, drawing, and letter-like forms) that represent meaning to them and their developing understanding about the relations between oral and written language.

Thus, even for young children, writing involves the act of composing or generating an idea of what they want to write and then using transcription skills (i.e., handwriting and spelling) to link these ideas to a written representation (e.g., scribbles, pictures, letters, or words) of their idea (Quinn & Bingham, 2019).

https://ila.onlinelibrary.wiley.com/doi/10.1002/trtr.2277

Activity 6.3: Writing Skill Development for Foundational Literacy

INSTRUCTION:

1.Work in groups on different boards or charts set up by MT in classroom.write one comment on each boards/charts which are taged with one topic from the handout 6.3.
2.Every group will answer their question below the the first answer of the previous group. Lets go around the room until all the groups have covered all the boards. Randomly share your answers with whole class.

Handout # 6.3

Writing Skill Development for Foundational Literacy

Early writing development begins as young children use a range of writing tools (e.g., crayons, markers, and chalk) to express their ideas as they author messages. As children integrate their knowledge of the relation between oral and written language, they begin to form letter-like shapes first as linear scribbles and then as discrete forms with similar line and curve features as letters. As children develop in their letter and letter sound knowledge, they first write strings of letters before making connections between the sounds they hear in words (Rowe & Wilson, 2015). Children's estimated spelling (attempts to spell phonetically) often represents initial or salient sounds in words, followed by medial sounds as they move toward conventional spelling (Bear *et al.*, 2020). When constructing ideas of what to write, it is generally understood in developmental standards that young children may use oral language and drawing to support their composing efforts (Tortorelli *et al.,* 2022). To promote this development, research demonstrates that children benefit from multiple, daily opportunities to write within meaningful experiences (Bingham *et al.,* 2017).
https://ila.onlinelibrary.wiley.com/doi/10.1002/trtr.2277

Creating Purposeful and Meaningful Writing Opportunities

Creating purposeful and meaningful writing opportunities in class ECCE to Grade 1-3 classrooms is important for promoting children's writing development because it help young learners strengthen their literacy skills. Including opportunities to write during different times of the day can also support children's understanding of, and attention toward, different classroom routines and how to more purposefully direct their play. These interactions can support authentic reasons for writing, such as generating a play plan, that are supportive of both more intentional play choices and children's emergent writing skills (Campbell *et al.,* 2019). In this example, Ms. Hervey embedded opportunities for her students to engage in meaningful composing as her class transitioned to learning centers.

Here are some examples of different classrooms:

1. After completing a lesson introducing the alphabet letters Mm and Nn, children practice forming letters—both capital and lowercase—on their own. Children finish this activity at varying times and are ready to transition to free play. To

facilitate this transition, Ms. Hervey invites children who are finished with their letter writing to view the laminated map of the classroom, and says, “Write where you will play today?” Using a dry erase marker, the first child writes her name at the pretend play center. Noting that this child wrote her name using all letters, Ms. Hervey provides the child blank paper and says, “Draw and write what you plan to do at the pretend play center today,” As the child draws and writes her plan, Ms. Hervey promptly asks another child to come make his mark on the map and explain what he plans to do at that center. This child writes lines to reflect his name and Ms. Hervey invites him to verbalize his play plan before transitioning to the selected center. Ms. Hervey checks in with the first child inviting her to share her written plan and the child transitions to the selected play center. This type of transition not only ensures a peaceful and organized transition to free play but also provides a learning experience for children as they organize and plan their ideas for designing intentional play. Note that Ms. Hervey supports some children to compose their plan verbally and others in writing, individualizing this transition to the skills of the child.

2. As children prepare to depart for the day, Ms. Rogers provides children with blank paper and markers and encourages children to talk, draw, and write about their favorite activity of the day. As children discuss their ideas, Ms. Rogers asks individual children questions to push their thinking and prompt idea generation, “Why was playing outside so much fun? What did you learn about the insects you observed today? How did you and Tracy build your skyscraper?” She promotes children to first talk about their ideas and then writes them. She knows that providing children with regular opportunities to express themselves on paper, without feeling too constrained for correct spelling and proper handwriting, helps children understand that writing has real purpose.

Activity 6.4: Teaching Learning Strategies for Writing Skill Development (ECCE & Grade-1) Supported with Socio-Emotional Skills

INSTRUCTION:

1.Work in groups on assigned topics from Handout 6.4,Read, Discuss and share key learnings about the teaching learning strategies for writing skill for ECCE to grade I.

2.Click the links from handout 6.4 and learn from video,prepare presentations and share with whole class.

Handout # 6.4

Teaching Learning Strategies for Writing Skill Development (ECCE & Grade-1) Supported with Socio-Emotional Skills

Developing writing skills in early childhood is crucial for literacy growth. Focus on these essential skills:

ECCE (Age 3-5)

1. Develop fine motor skills through tracing and drawing.
2. Practice writing their name legibly.
3. Engage in imitation writing and experimentation with writing tools.
4. Master uppercase and lowercase letter writing.
5. Refine name writing with correct spelling and letter formation.
6. Begin writing simple sentences and using inventive spelling.

Grade 1 (Age 5-6)

1. Write complete simple sentences (3 to 4 words) with correct capitalization and punctuation.
2. Identify main story components.
3. Use descriptive language to describe people, places, and things.

Writing Skills through Fun Activities

Helping children develop early writing skills is an important step toward building confidence and academic success. Teachers create engaging activities that combine visual supports, hands-on tools, and structured learning to make writing both fun and educational.

Interactive Tools for Writing Practice

One of our favorite approaches involves using colorful letter tiles and word-building cards. These tools encourage children to recognize letters, form words, and practice spelling. By pairing visual and tactile learning, we make it easier for students to connect sounds with letters and build words confidently.

Step-by-Step Learning Process

Teachers start with simple three-letter words like “ant,” “fox,” and “owl.” Children first match the letters using the tiles, then trace and write the words. This process reinforces letter recognition, strengthens motor control, and improves focus.

Fine Motor Development

Writing activities also enhance fine motor skills by encouraging children to grip pencils, trace letters, and draw lines. Teachers use additional tools like pencil grips and thick markers to help students feel comfortable as they practice forming letters.

Personalized Support for Socio Emotional Development

Experienced teachers provide personalized support for each child for socio-emotional development, ensuring they learn at their own pace. Whether your child needs extra help with writing or is ready to advance, we offer customized programs to meet their needs.

More Activities Writing Skills

Read Up

Regular reading is a stepping stone to better writing and helps kids' strengthen their writing skills. It helps expand children's vocabulary and shows them different ways of using words. This also makes it easier for them to use these words in their own writing. With younger children, make sure you're reading together every day and encouraging their love of reading as they grow. Start reading early—many children who devour books grow up to become strong writers themselves.

Make it Fun!

Play games and activities that encourage writing. Crossword puzzles and word games are great for everyone. Little ones will especially like the "write the word" game: where they search for items and write down the word when they find each item.

Create Writing Worksheets

For young children just learning to write, try creating a worksheet where they can trace letters and words. Write out letters and words, place another piece of paper on top, and have your child trace onto the blank piece of paper. You can also create a connect-the-dots game by having your child trace along dotted lines and then tell you which letter or word she or he finds.

Try Different Materials

Switch it up by writing with something other than a pen or pencil. Sidewalk chalk on the driveway, finger painting, or a salt writing tray are all fun writing activities that will also help build kids' writing skills.

Write Letters

Today, writing letters is a bit of a lost art. Encourage your child to write letters to friends or family members. Distant family members will especially love receiving handwritten letters and it's a great way to work on improving writing skills for kids.

Pen-pals are also a fun idea, or you can even write letters to each other and leave them around the house to find!

Encourage Journaling

Keeping a journal is a great way to express thoughts and ideas while also working on improving children's writing skills. Plan an outing to pick a fun journal with your child and encourage them to write in it as much as possible. Make it a part of his or her daily routine.

Create a Writing Space

Set aside a little corner in your house that is completely devoted to writing. Having an area dedicated solely to writing will help free your child from distractions so he or she can focus on practicing writing skills.

Invest Time

Make sure your child knows you're available to help with spelling or proofreading whenever he or she needs it. When you make writing time a priority for you, it will make it easier for your child to improve his or her writing skills.

Connect Their Interests

Think about your son or daughter's favorite book series. Or maybe he or she is obsessed with dinosaurs. Whatever his or her interests, connect them to writing. Have your child write a new short story about his or her favorite characters, or let him or her create a story all about dinosaurs.

Create Story Prompts

A fun way to improve kids' creative writing skills is to have them write short stories.

Cut out pictures from a magazine with different characters or locations, or write down different words. Place these in a container or glue them to cards to use as writing prompts for creating a unique story. This also makes a fun activity for the whole family to join in.

Model It

There's no better way to learn something than to see someone else doing it. Let your children see you writing, often. When writing is a normal part of your daily life, it will come more naturally to them. Anything goes: a simple grocery list or letter to the teacher, holiday or thank you cards, or even a sweet note to your child.

Use Technology to Your Advantage

There's no getting around the fact that technology plays a huge part in our lives. Use it to your advantage by having your child create a blog. This can help your child work on improving his or her writing skills by encouraging frequent writing habits.

Make it Part of Your Daily Routine

Make sure there's time each day to do some writing in one way or another. Whether it's writing a grocery list, writing in a journal or composing a letter, practicing writing every day will go a long way to improving kids' writing skills.

Praise Their Work

Show lots of interest in your child's writing and stories. Ask questions, celebrate when he or she brings home a good piece from school, and encourage his or her writing as much as possible.

Improving Writing Skills Can Be Fun

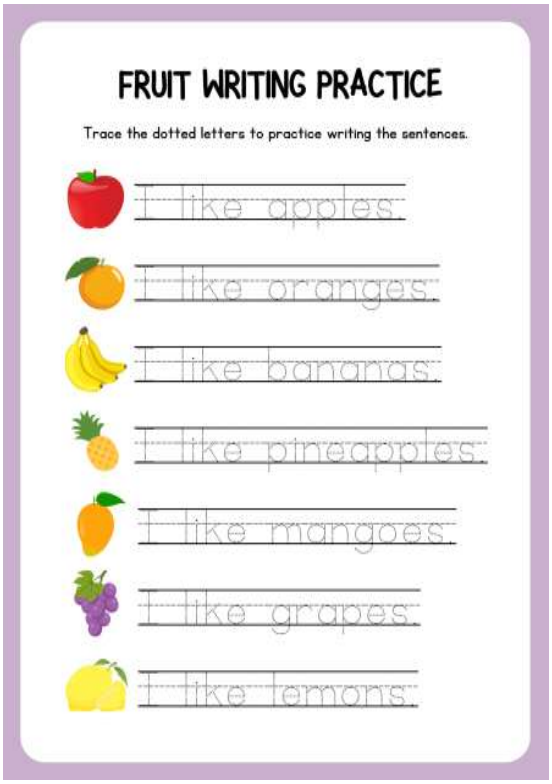
Writing is an important practical life skill. While developing great writing skills requires lots of time and patience, you can help your child with these simple writing exercises for kids.

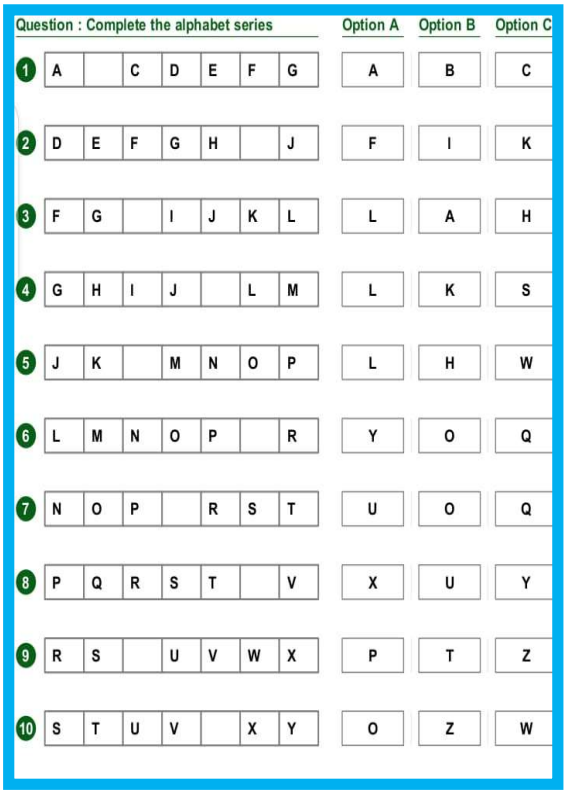
Lots of reading, frequent writing time in a special writing area, and incorporating fun writing activities and games will all go a long way to giving writing skills a boost.

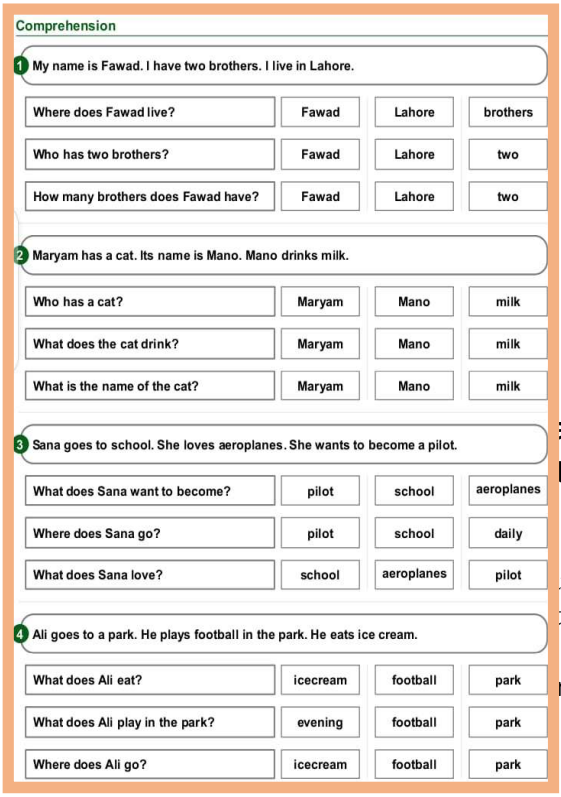
Source: https://www.oxfordlearning.com/improve-kids-writing-skills/

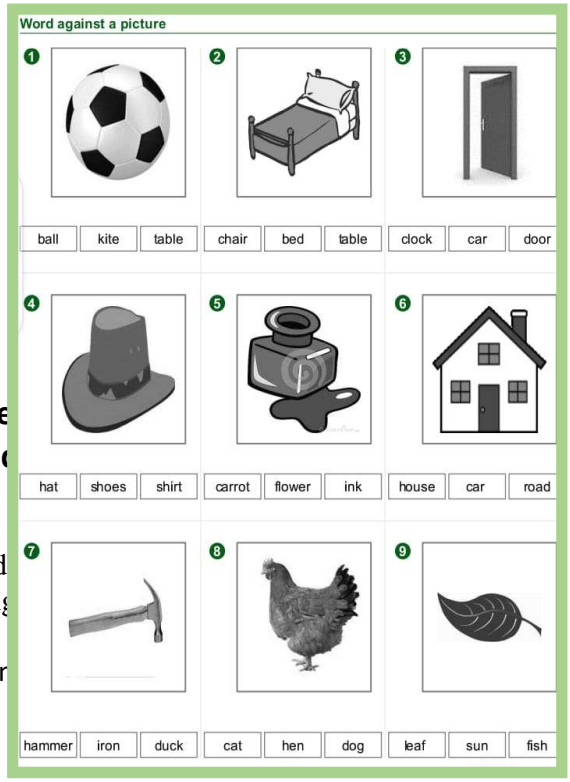
Activities for Grade 1

At Grade 1 level, young children should identify informative writing, distinguish facts from opinions, and be able to write simple yet complete sentences about a variety of topics




Question : Complete the alphabet series
Option A
Option B
Option C
1 A C D E F G A B C
2 D E F G H J F I K
3 F G I J K L L A H
4 G H I J L M L K S
5 J K M N O P L H W
6 L M N O P R Y O Q
7 N O P R S T U O Q
8 P Q R S T V X U Y
9 R S U V W X P T Z
10 S T U V X Y O Z W


Comprehension
1 My name is Fawad. I have two brothers. I live in Lahore.
Where does Fawad live? Fawad Lahore brothers
Who has two brothers? Fawad Lahore two
How many brothers does Fawad have? Fawad Lahore two
2 Maryam has a cat. Its name is Mano. Mano drinks milk.
Who has a cat? Maryam Mano milk
What does the cat drink? Maryam Mano milk
What is the name of the cat? Maryam Mano milk
3 Sana goes to school. She loves aeroplanes. She wants to become a pilot.
What does Sana want to become? pilot school aeroplanes
Where does Sana go? pilot school daily
What does Sana love? school aeroplanes pilot
4 Ali goes to a park. He plays football in the park. He eats ice cream.
What does Ali eat? icecream football park
What does Ali play in the park? evening football park
Where does Ali go? icecream football park



Handout # 6.5

Teaching Learning Strategies for Writing Skill Development

(Grade2- Grade 3) Supported with Socio-Emotional Skills

Children are keen learners, great thinkers and skilled absorbers. Therefore, it is essential to make students of Grade 2-3 (Age 6-8) be:

1. Make writing engaging with games, activities, and hands-on experiences.
2. Offer constructive feedback to foster improvement.
3. Encourage regular writing practice.
4. Incorporate multisensory approaches to develop writing skills.
5. Construct more complex sentences and use transitional words.
6. Write longer paragraphs with clear topic sentences and supporting details.
7. Develop basic editing skills to refine writing.

- A good way for the beginners is to start with story writing. Stories fascinate all kids equally. Many classrooms have become fairly easy to show them a sequence of related pictures and ask them to first make a vocabulary list and then frame sentences that can turn into a story.
- Another way while beginning writing skills with them is to write a number of words related to the topic randomly on the board. Ask them to use these words and form short meaningful sentences and then as a part of group discussion, develop a paragraph. Let each child speak out a sentence. Kids will then be able to pen it down easily with such repeated practices.
- While doing letter writing. Children start with the proper format of a letter with few missing words so that the children get familiar with the format and content of the letter and can fill in some words on their own. Consequently, some home task may be given for practice.
- Daily vocabulary usage will help them learn faster. Ask them to create a mini dictionary for themselves in which they can write two new words and their meanings every day.

Source: https://www.quora.com/How-can-a-teacher-develop-writing-skills-in-his-her-young-learners

There are many other interactive teaching ideas as well. I split up the activities in different categories:

- Individual student activities
- Student pair activities
- Student group activities

- Interactive game activities

  - **Think, pair and share:**
    - Set a problem or a question around a certain topic, and pair up your students.
    - Give each pair of students enough time so they can reach a proper conclusion, and permit the kids to share their conclusion in their voice. This way your students will be engaged, communicating, and remember more of the class than ever before.

  - **Buzz session**
    - Participants come together in session groups that focus on a single topic. Within each group, every student contributes thoughts and ideas.
    - Encourage discussion and collaboration among the students within each group.
    - Everyone should learn from each other's input and experiences. As a teacher, you could give your students some keywords to spark the conversation.

  - **Peer review writing task**
    - To assist students with a writing assignment, encourage them to exchange drafts with a partner.
    - The partner reads the text and writes a response in a simple word/sentence: the first paragraph outlines the strengths of the essay, the second paragraph discusses the essay's problems, and the third paragraph is a description of what the partner would focus on in revision if it were her essay.
    - Students can learn a lot from each other and themselves as well! Here are 10 more creative self-assessment ideas.

  - **Bingo**
    - Bingo is a fun game that can be used for all sorts of exercises: language exercises, introductory games, math exercises, etc. Take a look at this blog post with all the different bingo possibilities here. You'll be surprised about how many interactive lesson activities you can do with just one game.

  - **Picture Story: Show and write**
    - Look at the picture ad write simple stories and ask simple comprehension questions.
    - Encourage children to write for specific words or phrases.
    - Provide opportunities for children to act out different roles and scenarios.

  - **Vocabulary Building:**
    - Introduce new vocabulary words in context.
    - Use visual aids and real-life examples to illustrate word meanings in writing.
    - Play vocabulary games to reinforce learning.

- **Board rotation**
  - This interactive learning strategy is even more interactive than others!
  - Divide your class into different groups of students and assign them to each of the boards you've set up in the room.
  - Assign one topic/picture on per board. After each group writes a sentence while seeing on board, they rotate to the next board. Here, they write their sentences below the first answer of the previous group. Let them go around the room until all the groups have covered all the board.

Day 07

Activity 7.2: Importance of A.V Aids for Foundational Literacy

INSTRUCTION:

1.Work in groups as per assigned topics of different areas of foundational Literacy to the groups such as, Phonemic Awareness, Phonics, Vocabulary, Fluency, Comprehension ,write your comments on assigned board/ chart .

2.Read ,discuss handout 7.2 and add more information to your respective board or chart afterward exchange your learning with each other interactively with whole class.

Handout # 7.2

Importance of A.V Aids for Foundational Literacy

Teaching aids play a crucial role in building foundational literacy skills in young learners. Here's a breakdown of their importance:effective Audio-Visual (A.V.) aids to support the development of phonemic awareness. These tools help children hear, see, and manipulate the individual sounds (phonemes) within words.

(A)Audio Visual Aids for Phonemic Awarness:Effective Audio-Visual (A.V.) aids to support the development of phonemic awareness. These tools help children hear, see, and manipulate the individual sounds (phonemes) within words.

I. Visual Aids with Auditory Reinforcement:

- **Picture Cards with Sound Focus:**
    - Show a picture (e.g., a cat). As you say the word slowly, emphasize each sound and point to a visual representation (e.g., colored dots or blocks) for each phoneme: /k/-/æ/-/t/.
    - Use pictures representing minimal pairs (words that differ by one phoneme, like "cat" and "hat") and have students identify the changing sound.
- **Elkonin Boxes with Manipulatives:**
    - Present a picture and a set of connected boxes, one for each phoneme in the word. As you say the word slowly, or as the students segment the sounds, they push a manipulative (e.g., a counter, a small block) into each box for each sound they hear.
    - **Digital Elkonin Boxes:** Interactive whiteboard activities where students can drag and drop virtual counters into the boxes as they hear the sounds.
- **Sound Walls:**
    - A visual display that organizes phonemes based on their articulatory features (how they are produced) or by common spellings. Include pictures of words

that begin with each sound and, ideally, short video clips showing how to form the sounds with the mouth.
    - **Interactive Sound Walls:** Digital versions where students can click on a phoneme to hear its sound and see example words and videos.
- **Letter Tiles or Magnetic Letters with Sound Pronunciation:**
    - Use physical or digital letter tiles. As you build or manipulate words, pronounce each phoneme clearly.
    - **Interactive Letter Tile Apps:** Apps that pronounce the sound of each letter tile when it's touched or dragged.
- **Cued Articulation Charts/Videos:**
    - Visual charts or short videos that show hand cues associated with each phoneme. This provides a kinesthetic and visual link to the auditory sound.

II. Auditory Aids with Visual Support:

- **Audio Recordings of Isolated Phonemes and Words:**
    - Create clear recordings of individual phonemes and words, emphasizing each sound. Pair these recordings with written words or pictures.
    - **Interactive Sound Boards:** Digital tools where students can click on a letter or picture to hear its corresponding sound or word.
- **Phoneme Blending and Segmenting Songs/Rhymes with Visuals:**
    - Use songs or rhymes that focus on blending sounds to make words or segmenting words into their individual sounds. Display the lyrics or accompanying pictures.
    - **Animated Videos:** Engaging videos that visually represent the blending and segmenting process (e.g., sounds joining together like puzzle pieces to form a word, or a word breaking apart into individual sound bubbles).
- **"Mystery Sound" Activities with Visual Clues:**
    - Play the sound of a phoneme or a word. Provide visual clues (pictures) and have students guess the sound or word.
- **Digital Storybooks with Highlighted Words and Audio:**
    - Use interactive storybooks where words are highlighted as they are read aloud, helping students connect the visual representation of the word with its spoken sounds and the individual phonemes within.

(B)Audio Visual Aids for Phonics: The Audio-Visual (A.V.) aids to support **phonics**, which is the understanding of the relationship between letters (graphemes) and the sounds (phonemes) they represent, and how these letter-sound correspondences are used to read and spell words.

Here are some effective A.V. aids for phonics instruction, categorized for clarity:

I. Visual Aids with Auditory Reinforcement:

- **Alphabet Charts with Pictures:**
    - Display charts showing each letter (uppercase and lowercase) paired with a picture of an object whose name begins with the common sound of that letter (e.g., A for apple, B for ball). As you introduce each letter, say its name and the corresponding sound clearly.
- **Letter Tiles or Magnetic Letters with Sound Pronunciation:**
    - Use physical or digital letter tiles. As you introduce letter sounds, say the sound while showing the letter. When building words, pronounce each letter's sound as you place the tile.
    - **Interactive Letter Tile Apps:** Apps that pronounce the sound of a letter when it's touched or dragged.
- **Flashcards (Letters, Digraphs, Blends, Words):**
    - Show flashcards with individual letters, digraphs (two letters making one sound, like "sh"), blends (two or three letters whose sounds are blended together, like "bl"), and whole words. When showing a card, say the corresponding sound(s) or word clearly.
    - **Sound Button Flashcards:** Flashcards with a button that, when pressed, plays the associated sound.
- **Word Walls:**
    - Create a visual display of high-frequency words, words following specific phonics patterns (e.g., CVC words, words with long a), or words with digraphs/blends. Say the words aloud as you add them to the wall and refer to them during reading and writing activities.
- **Coded Text:**
    - Use visual markings (e.g., underlining digraphs, circling blends, marking long vowels) on written words to highlight the phonics patterns. Say the sounds as you point to the coded parts.
- **Interactive Whiteboard Activities:**
    - Drag and drop letters to build words, match letters to sounds or pictures, highlight phonics patterns in words, and play interactive phonics games with visual and auditory feedback.
- **Animated Letter Sounds:**
    - Short video clips or animations that visually represent the formation of letter sounds (e.g., showing the mouth position for /th/ or /s/) while simultaneously playing the sound.

II. Auditory Aids with Visual Support:

- **Audio Recordings of Letter Sounds and Words:**
    - Create clear recordings of individual letter sounds, digraph sounds, blend sounds, and whole words. Pair these recordings with the written letters or words.
    - **Sound Boards:** Digital tools where students can click on a letter or word to hear its corresponding sound or pronunciation.
- **Phonics Songs and Rhymes with Visuals:**
    - Use songs and rhymes that emphasize letter sounds and phonics patterns. Display the lyrics or accompanying pictures.
    - **Animated Phonics Songs:** Engaging videos that visually represent the letter sounds and words in a song format.
- **"Sound Out" Activities with Audio and Visual Cues:**
    - Present a written word and model how to "sound it out" by saying each letter's sound. Use visual cues like pointing to each letter as you say its sound.
- **Digital Storybooks with Pronunciation:**
    - Use interactive storybooks where students can click on words to hear them pronounced, reinforcing the letter-sound correspondences within the context of reading.

(C)Audio Visual Aids for Vocabulary: The effective Audio-Visual (A.V.) aids to enhance vocabulary development. These tools help learners connect new words with visual representations, hear their correct pronunciation, and see them used in context, leading to deeper understanding and retention.

Here are some ideas, categorized for clarity:

I. Visual Aids with Auditory Reinforcement:

- **Picture Cards with Labels:**
    - Show clear and engaging pictures of objects, people, actions, and concepts. Include the written word label beneath the picture. Say the word aloud clearly as you present the card.
    - **Thematic Picture Sets:** Organize picture cards around specific themes (e.g., animals, food, transportation) to build related vocabulary.
- **Realia (Real Objects):**
    - Bring in actual objects to the classroom (e.g., a book, a pencil, a fruit). Say the name of the object clearly and encourage students to touch and interact with it.

- **Flashcards with Definitions or Sentences:**
    - For more abstract vocabulary, use flashcards with the word on one side and a simple definition or a sentence using the word on the other. Read the word, definition, and sentence aloud.
- **Visual Dictionaries and Thesauruses:**
    - Use illustrated dictionaries and thesauruses that provide pictures alongside definitions and synonyms. Encourage students to look up new words and see their visual representations.
    - **Digital Visual Dictionaries:** Online resources that offer images, definitions, and audio pronunciations for words.
- **Graphic Organizers:**
    - Use visual tools like word webs, semantic maps, and Frayer Models to help students explore the meaning of a word, its characteristics, examples, and non-examples. Discuss the word and its connections aloud as you fill in the organizer together.
- **Word Walls with Visuals:**
    - Create word walls categorized by themes, parts of speech, or vocabulary learned in a unit. Include pictures or simple drawings alongside the words. Say the words aloud regularly.
- **Coded Text for Word Parts:**
    - Use visual cues (e.g., highlighting prefixes, suffixes, root words in different colors) to help students understand word structure and meaning. Say the parts and the whole word aloud.

II. Auditory Aids with Visual Support:

- **Audio Recordings of Words and Sentences:**
    - Create clear recordings of target vocabulary words pronounced correctly and used in meaningful sentences. Provide written transcripts or visual aids (pictures) to accompany the audio.
    - **Podcasts and Audio books:** Use age-appropriate podcasts or audiobooks that introduce new vocabulary in context. Provide visual aids or discuss new words beforehand or afterwards.
- **Songs and Rhymes with Vocabulary Focus:**
    - Use songs and rhymes that incorporate target vocabulary words. Display the lyrics or related pictures.
    - **Vocabulary Building Songs:** Specifically designed songs that introduce and reinforce new words with catchy tunes and visuals.

- **"Mystery Word" Audio Clues with Visual Options:**
    - Provide auditory clues (definitions, sentences, sounds associated with the word) and visual options (pictures) for students to guess the target vocabulary word.

(D)Audio Visual Aids for Fluency: The Audio-Visual (A.V.) aids that can help improve reading fluency, which encompasses speed, accuracy, and prosody (expression). Here are some effective A.V. tools to support fluency development:

I. Visual Aids with Auditory Reinforcement:

- **Modeled Fluent Reading with Text:**
    - **Teacher Modeling:** Read aloud fluently while students follow along in their own copies of the text. Your fluent reading serves as the auditory model, and the text provides the visual. Point to the words as you read to support visual tracking.
    - **Video Recordings of Fluent Readers:** Show short video clips of fluent readers (adults or older students) reading the same text the students are working on. This provides another auditory model paired with the visual text.
- **Choral Reading with Visual Pacing:**
    - Display the text on a screen or chart. Use a pointer or your finger to guide the pace of reading as the whole class reads aloud in unison with you. This helps students match their reading speed to a fluent model.
- **Echo Reading with Visual Text:**
    - You read a short phrase or sentence fluently, pointing to the words as you go. Students then "echo" read the same phrase or sentence, looking at the text as they repeat.
- **Partner Reading with Visual Tracking:**
    - Students read aloud to a partner, taking turns. Encourage the stronger reader to model fluent reading, and the weaker reader follows along visually.
- **Repeated Reading Materials with Visual Cues:**
    - Use the same short passage for repeated reading practice. You can visually mark chunks of text for phrasing or highlight words that students struggled with during previous readings.
- **Visual Timers and Progress Charts:**
    - Use visual timers (e.g., sand timers, digital timers with progress bars) during timed reading activities to help students become aware of their reading speed. Use visual charts to track their progress in words correct per minute (WCPM) over time, providing a visual representation of their improvement.

II. Auditory Aids with Visual Support:

- **Audio Recordings of the Text:**
    - Provide students with audio recordings of the text they are practicing. They can listen to the fluent reading while following along visually in their books. This helps them internalize the rhythm, pacing, and expression of fluent reading.
    - **Text-to-Speech Software:** Allow students to use text-to-speech tools to hear the text read aloud. This can be particularly helpful for struggling readers to build confidence and hear fluent phrasing.
- **Reader's Theater Scripts with Audio Cues:**
    - Use reader's theater scripts with assigned roles. Provide audio recordings of fluent readings of the script for students to listen to and emulate. The visual script helps them follow along and understand their parts.

(E)Audio Visual Aids for Comprehension: The effective Audio-Visual (A.V.) aids to support reading comprehension. These tools help students understand the meaning of what they read by providing visual context, auditory support, and interactive ways to engage with the text.

I. Visual Aids with Auditory Reinforcement:

- **Picture Books and Illustrated Texts:**
    - High-quality illustrations directly related to the text can provide crucial visual context, helping students understand vocabulary, characters, settings, and events. Reading these aloud reinforces the connection between the words and the visuals.
- **Graphic Organizers:**
    - Tools like story maps (characters, setting, problem, solution), sequence charts, Venn diagrams (comparing and contrasting), and cause-and-effect diagrams help students visually organize information from the text. Discussing and filling these out aloud enhances understanding.
- **Real Objects (Realia) and Manipulatives:**
    - For concrete concepts, showing real objects or using manipulatives (e.g., counters for counting events, toy characters for story retelling) can make abstract ideas more tangible. Discussing how these relate to the text aloud is key.
- **Photographs and Images:**
    - Using photographs or relevant images can build background knowledge and provide visual context for the text. Discussing what students see and how it connects to the reading material enhances comprehension.
- **Timelines:**

    - For historical texts or stories with a sequence of events, visual timelines help students understand the chronological order. Discussing the events and placing them on the timeline aloud reinforces understanding.
- **Maps and Globes:**
    - When reading about different places, using maps and globes provides a visual understanding of geography and setting. Discussing locations and their relevance to the text aloud is important.
- **Semantic Webs/Word Webs:**
    - Visually connecting a central word or concept with related ideas, synonyms, antonyms, and examples helps students build a deeper understanding of vocabulary within the text. Discussing the connections aloud is beneficial.
- **Coded Text for Comprehension Strategies:**
    - Use visual cues in the text (e.g., highlighting key words, underlining main ideas, question marks for things to wonder about) to prompt students to use specific comprehension strategies. Discussing why these markings are important reinforces the strategies.

II. Auditory Aids with Visual Support:

- **Read-Alouds (Teacher or Audio Recordings):**
    - Hearing fluent reading allows students to focus on understanding the content without being bogged down by decoding difficulties. Following along with the text visually reinforces the connection between spoken and written words.
    - **Audio books:** Provide access to audiobooks of the texts being studied. Students can listen while reading along or independently.
- **Think-Alouds (Teacher Modeling):**
    - While reading aloud, explicitly model your thinking process: making predictions, asking questions, summarizing, clarifying, and making connections. The auditory explanation paired with the visual text makes these strategies concrete.
- **Audio Recordings of Summaries or Explanations:**
    - Provide audio recordings of summaries of key sections of the text or explanations of complex concepts. Students can listen while referring to the relevant parts of the text visually.
- **Music and Sound Effects:**
    - For creating atmosphere and engaging students emotionally with a text, appropriate background music or sound effects can be used during read-alouds or while students are reading. Visuals related to the mood can further enhance this.

Activity 7.4: Micro teaching

INSTRUCTION:

1. brainstorm about the Microteaching and write responses on board.
2. Categoriz the responses in Planning and Demonstration, Focused Skills Development, Constructive Feedback, Increased Confidence, Reflective Practice, Professional Collaboration, Adaptability.

3.Mark numbers and/or arrows to create sequence/linkage.

4. .Read ,discuss handout 7.4 and write key points of findings afterward exchange your learning with each other interactively with whole class.

Handout # 7.4

Micro teaching Practice for Teachers

Micro teaching is a teacher training technique that allows educators to hone their skills by practicing with a small group of peers. It involves planning, demonstration, feedback, and reflection, enabling teachers to refine their techniques in a controlled environment. This handout provides a comprehensive overview of the micro-teaching process, emphasizing its importance in professional development and its impact on teaching effectiveness.

Planning and Demonstration

Planning

The micro teaching process begins with careful planning. Teachers identify specific skills or techniques they want to focus on, such as questioning strategies, classroom management, or the use of technology in instruction. Planning involves:

- Setting clear, measurable objectives for the lesson.
- Developing a detailed lesson plan that outlines the instructional activities and materials needed.
- Considering the group of peers who will participate in the microteaching session, ensuring they can provide relevant feedback.

Demonstration

During the demonstration phase, the teacher presents a short lesson, typically 5-10 minutes, to a small group of peers or students. This simulated teaching session allows the teacher to implement their lesson plan and practice the targeted skills. Key aspects of the demonstration include:

- Engaging the audience through interactive and dynamic teaching methods.
- Utilizing the planned materials and technology effectively.
- Maintaining a clear and focused delivery, aligned with the lesson objectives.

Focused Skills Development

Micro-teaching enables teachers to concentrate on specific skills, breaking down the complex act of teaching into manageable components. By focusing on one or two skills at a time, teachers can:

- Enhance their questioning techniques to promote higher-order thinking.
- Improve classroom management strategies to create a positive learning environment.
- Develop effective communication skills to ensure clarity and engagement.
- This targeted approach allows teachers to incrementally build their proficiency, leading to overall improvement in their teaching practice.

Constructive Feedback

Receiving Feedback

One of the core components of micro-teaching is the feedback session that follows the demonstration. Peers provide constructive feedback, highlighting strengths and areas for improvement. Effective feedback should be:

- Specific and focused on observable behaviour.
- Balanced, offering both positive reinforcement and constructive criticism.
- Delivered in a supportive and non-judgmental manner.

Providing Feedback

Teachers also learn to give constructive feedback to their peers. This reciprocal process enhances their ability to critically analyze teaching practices and fosters a collaborative learning environment.

- Increased Confidence
- Repeated practice and feedback through micro-teaching help build teachers' confidence in their instructional abilities. By successfully implementing and refining their skills in a supportive setting, teachers gain:
- Greater self-assurance in their teaching methods.
- A sense of accomplishment from achieving incremental improvements.
- Reduced anxiety when trying new techniques in the actual classroom.
- This increased confidence translates to more effective and engaging teaching practices.

Reflective Practice

Reflection is a crucial element of micro-teaching. After receiving feedback, teachers engage in self-reflection to assess their performance and identify areas for further development. Reflective practice involves:

- Analyzing the effectiveness of the lesson and the achievement of objectives.
- Considering the feedback received and planning for future improvements.
- Documenting insights and strategies in a reflective journal for ongoing professional growth.

- Through reflection, teachers develop a deeper understanding of their teaching practices and how they impact student learning.

Professional Collaboration

Micro-teaching fosters a culture of collaboration among teachers. By participating in micro-teaching sessions, teachers:

- Share best practices and innovative teaching strategies.
- Support each other's professional development through constructive feedback and encouragement.
- Build a sense of community and collective responsibility for student success.
- This collaborative environment enhances professional relationships and promotes a continuous cycle of improvement.

Adaptability

Teachers who engage in micro-teaching become more adaptable in their instructional approaches. The process of experimenting with different techniques and receiving feedback allows them to:

- Develop a repertoire of teaching strategies that can be tailored to diverse classroom situations.
- Respond effectively to varying student needs and learning styles.
- Adjust their teaching methods based on reflective insights and evidence from practice.
- Adaptability is a key trait for effective teaching, ensuring that educators can meet the dynamic demands of the classroom.

Enhanced Student Learning

Ultimately, the goal of micro-teaching is to improve student learning outcomes. By refining their teaching practices, teachers can:

- Create more engaging and interactive lessons that capture students' interest.
- Implement effective strategies that enhance student understanding and retention of material.
- Foster a positive and inclusive classroom environment that supports all learners.
- When teachers improve their skills through micro-teaching, it directly benefits their students, leading to better educational experiences and achievements.

Evidence-Based Improvement

Microteaching promotes evidence-based improvement in teaching practices. By systematically analyzing their teaching through feedback and reflection, teachers can:

- Identify specific areas for improvement based on concrete evidence from their microteaching sessions.
- Implement changes that are informed by feedback and reflective insights.

- Continuously monitor and evaluate the impact of these changes on their teaching and student learning.
- This evidence-based approach ensures that professional development is focused and effective, leading to sustained improvement in teaching quality.

Conclusion

Micro-teaching is a powerful tool for teacher professional development. It provides a structured yet flexible framework for teachers to practice, receive feedback, reflect, and collaborate. By engaging in micro-teaching, educators can develop their skills, build confidence, and enhance their adaptability, ultimately leading to improved student learning outcomes. Embracing micro-teaching as a regular practice fosters a culture of continuous improvement and evidence-based teaching, ensuring that educators are well-equipped to meet the evolving needs of their students.

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SECTION III: NUMERACY

Day 08

Activity 8.2: Introduction to Foundational Numeracy Skill in Early Years

INSTRUCTION:

1.Brainstorm by giving flash card and write your responses on flash cards.

2.Work in groups on Handout 8.2 ,Read ,discuss and make a poster presentation in front of whole class interactively and paste it on the wall of classroom.

Handout # 8.2

Introduction of Foundational Numeracy in Early Years

Foundational numeracy skills are the essential mathematical abilities that form the basis for understanding and using numbers in everyday life and for further mathematical learning. The core concepts of Numeracy skills are as follows.

1. Number Sense:

- Understanding the meaning of numbers and their relationships.
- Recognizing quantities and comparing them.
- Understanding the number line and the relative size of numbers.

1. **Counting:**
   - Accurately counting objects.
   - Understanding the sequence of numbers.
   - Grasping the concept of "how many."
2. **Basic Arithmetic Operations:**
   - Adding, subtracting, multiplying, and dividing.
   - Understanding the concepts behind these operations.
   - Solving simple arithmetic problems.
3. **Mathematical Reasoning:**
   - Solving problems logically.
   - Identifying patterns and relationships.
   - Making estimations.
4. **Measurement:**
   - Understanding basic units of measurement (length, weight, time).
   - Being able to use those measurements in practical ways.
5. **Spatial Reasoning:**
   - Understanding basic shapes.
   - Understanding spatial relationships.

Importance of Foundational Numeracy Skills:

The importance of foundational numeracy skills in the early years cannot be overstated. It lays the groundwork for future academic success and equips children with essential life skills. Here's a breakdown of why it's so crucial:

1. Building a Strong Foundation:

- **Cognitive Development:**
  - Early numeracy activities stimulate cognitive development, enhancing logical thinking, problem-solving, and reasoning abilities.
  - It helps children understand patterns, relationships, and spatial awareness.

Future Academic Success:

- A solid foundation in numeracy is essential for success in later mathematics education and other STEM-related fields.
- Children who develop strong numeracy skills early on are more likely to excel in school.

2. Essential Life Skills:

- **Everyday Problem-Solving:**
  - Numeracy skills are vital for navigating daily life, from telling time and managing money to following recipes and understanding measurements.
  - It empowers children to make informed decisions and solve practical problems.
- **Developing Confidence:**
  - Mastering basic numeracy concepts builds children's confidence and fosters a positive attitude towards mathematics.
  - This confidence extends beyond mathematics, promoting a growth mindset and a willingness to tackle challenges.

3. Enhancing Overall Development:

- **Language Development:**
  - Numeracy is closely linked to language development, as children learn to use mathematical vocabulary and express quantitative concepts.
- **Social and Emotional Development:**
  - Engaging in numeracy activities with others promotes social interaction, cooperation, and communication skills.
  - It also helps children develop patience, perseverance, and resilience.

Activity 8.3: Understanding of Concept Number & Number Operations at ECCE-Grade1-3

INSTRUCTION:

1.Brainstorm by giving flash card and write your responses on board.

2.Work in groups on Handout 8.3 ,Read ,discuss and make a poster presentation in front of whole class interactively and paste it on the wall of classroom.

Handout # 8.3

Understanding of Concept 'Numbers & Numbers Operation' at ECCE to Grade 1-3

Understanding the concept of 'Numbers & Number Operations' is a foundational element in early childhood education (ECCE) through grades 1-3. It's not just about memorizing numerals and facts, but about developing a strong sense of number and how numbers work in different situations. Here's a breakdown of the key aspects at each stage:

ECCE (Early Childhood Care and Education - Roughly Ages 3-5):

At this stage, the focus is on building **number sense** through playful exploration and concrete experiences. The key concepts include:

- **Number Recognition:**
  - Recognizing and naming small quantities (1-3) without counting (subitizing).
  - Identifying numerals (1-10 initially) and associating them with quantities.
  - Understanding that numbers represent "how many."
- **Counting:**
  - Rote counting (saying numbers in sequence).
  - One-to-one correspondence (matching each object with one number word).
  - Cardinality (understanding that the last number counted represents the total).
  - Counting small sets of objects (up to 5, then gradually increasing).
- **Comparing Quantities:**
  - Using terms like "more," "less," "same," "bigger," "smaller."
  - Making direct comparisons between small groups of objects.
- **Early Operations (Informal Introduction):**
  - **Joining:** Combining small groups of objects and seeing the total ("If I have 2 blocks and you give me 1 more, now I have 3").
  - **Separating:** Taking away objects from a small group and seeing what's left ("If I have 3 cookies and I eat 1, now I have 2").
  - These are explored through play and stories, not formal symbols.

- **Patterns:**
    - Recognizing and creating simple patterns with objects (e.g., red block, blue block, red block...). This lays the groundwork for understanding mathematical relationships.
- **Spatial Awareness:**
    - Using positional words (e.g., "over," "under," "next to") which indirectly supports later understanding of number lines and ordering.

Grade 1:

Building upon the foundation laid in ECCE, Grade 1 focuses on solidifying number sense and introducing basic number operations with more formality:

- **Number Recognition and Counting:**
    - Reading, writing, and ordering numbers up to 100.
    - Counting forward and backward from any given number.
    - Skip counting by 2s, 5s, and 10s.
    - Understanding place value for tens and ones.
- **Addition and Subtraction:**
    - Understanding the meaning of addition as "putting together" and subtraction as "taking away" or "finding the difference."
    - Solving simple addition and subtraction problems within 20 using concrete objects, drawings, and number lines.
    - Introducing the symbols (+) and (-).
    - Developing basic addition and subtraction facts (e.g., sums up to 10).
- **Comparing and Ordering Numbers:**
    - Using symbols (<, >, =) to compare numbers.
    - Ordering numbers from smallest to largest and vice versa.
- **Problem Solving:**
    - Solving simple word problems involving addition and subtraction.

Grade 2:

In Grade 2, the focus expands to larger numbers and more complex operations:

- **Number Recognition and Place Value:**
    - Reading, writing, and ordering numbers up to 1000.
    - Understanding place value for hundreds, tens, and ones.
    - Representing numbers in different ways (e.g., base-ten blocks, expanded form).
- **Addition and Subtraction:**

    - Fluently adding and subtracting within 20.
    - Adding and subtracting numbers up to 100 with and without regrouping (carrying and borrowing).
    - Solving multi-step addition and subtraction word problems.
- **Introduction to Multiplication and Division (Conceptual):**
    - Understanding multiplication as repeated addition (e.g., 3 groups of 2 is the same as 2 + 2 + 2).
    - Understanding division as sharing equally or repeated subtraction (informally).
    - Using concrete objects and drawings to model these concepts.
- **Number Patterns:**
    - Identifying and extending more complex number patterns.
- **Estimation:**
    - Making reasonable estimates for sums and differences.

Grade 3:

Grade 3 builds on previous knowledge, focusing on fluency with operations and introducing larger numbers and more formal multiplication and division:

- **Number Recognition and Place Value:**
    - Reading, writing, and ordering numbers up to 10,000.
    - Understanding place value up to thousands.
- **Addition and Subtraction:**
    - Fluently adding and subtracting numbers up to 1000 with regrouping.
    - Solving multi-step word problems involving addition and subtraction.
- **Multiplication and Division:**
    - Developing understanding of multiplication facts up to 10 x 10.
    - Understanding the properties of multiplication (commutative, associative, distributive - informally).
    - Solving simple multiplication problems.
    - Understanding division as the inverse of multiplication and as equal sharing.
    - Solving simple division problems with and without remainders (using objects and drawings).
- **Fractions (Introduction):**
    - Understanding the concept of a fraction as part of a whole.
    - Identifying and naming basic fractions (e.g., 1/2, 1/4, 1/3).
- **Problem Solving:**
    - Solving a variety of word problems involving all four operations.

Underlying Principles Across All Stages:

- **Concrete to Abstract:** Learning progresses from hands-on experiences with physical objects to pictorial representations and finally to abstract symbols and rules.
- **Number Sense as the Foundation:** A strong intuitive understanding of numbers is crucial for success with operations.
- **Play-Based Learning:** Engaging children in games, songs, and hands-on activities makes learning more enjoyable and effective.
- **Real-World Connections:** Relating number concepts and operations to everyday situations helps children see their relevance.
- **Visual Aids:** Using pictures, diagrams, number lines, and other visual tools supports understanding.
- **Language Development:** Explicitly teaching and using mathematical vocabulary is essential.

Activity 8.4: Teaching Learning Strategies for Foundational Numeracy (Basic mathematical Concept) at ECCE level, Number Sense: Recognition, Counting, Number Sense, Read & Write Numbers

INSTRUCTION:

1. Work in 10 groups and assign one game for each from Handout 8.4.

2.Click the links from **handout 8.4** and learn from video. And prepare those games as Hands-on activity for classroom.

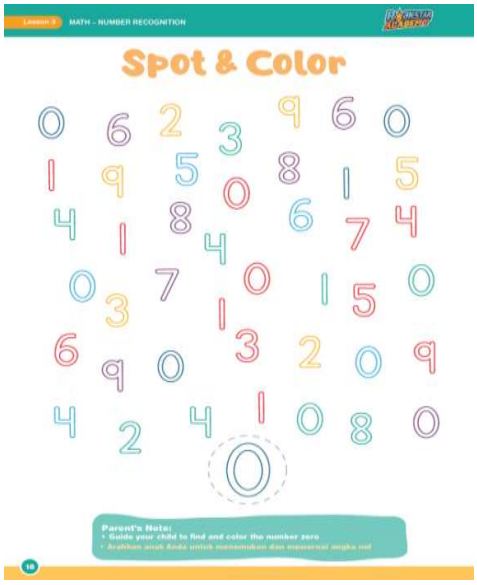
3.Present your game in front of whole class from ECCE to Grade1-3.

Handout # 8.4

Teaching Learning Strategies for Foundational Numeracy (Basic mathematical Concept) at ECCE level, Number Sense: Recognition, Counting, Number Sense, Read & Writing

How teach Number sense through games?

1. Number Treasure Hunt



Kids love a good treasure hunt, and incorporating numbers into the game makes it both fun and educational! To set this up, hide number flashcards around the room or outdoor space. You can pair each card with small treats or toys to make it more exciting.

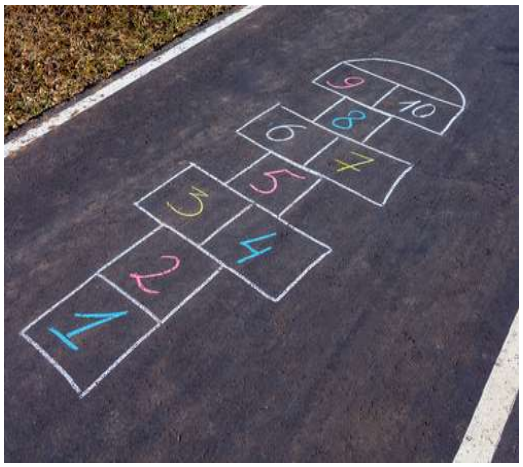
For instance, if your child finds a card with the number "4," they can collect four candies or toys as their prize. Add a twist by asking them to match the number card with a group of objects showing the same quantity. This activity not only reinforces number recognition but also helps kid's associate numbers with real-life quantities.

2. Playdough Number Mats

Playdough activities are fantastic for tactile learners. Print or draw number mats with large numbers and pictures of corresponding objects. For example, a mat for the number "5" could include an outline of the number and five stars to count.

Give your child playdough and ask them to roll it into thin strips to trace the numbers. Alternatively, they can create small shapes (like playdough apples) to place on the mat. This activity improves fine motor skills while helping kids connect numbers to quantities.

3. Hopscotch with Numbers: Hopscotch is not just for fun but it's also a great way to learn numbers while staying active. Use chalk to draw a hopscotch grid outside or create one indoors with masking tape. Write numbers in each square, and call out numbers for your child to hop to. For added fun, introduce simple tasks such as "Hop to number 3 and clap 3 times." This combines number recognition with physical activity, helping kids associate numbers with actions.



4. Number Songs and Rhymes

Music is a powerful learning tool, especially for preschoolers. Songs like "Five Little Ducks" or "Ten Green Bottles" are great for teaching number recognition and counting.

For example, as you sing "Five Little Ducks," hold up five fingers and count down with each verse. Adding gestures or props, like small toys representing ducks, can make the activity even more engaging. Songs help kids memorize numbers effortlessly while enjoying the rhythm and repetition.

5. Sensory Bins with Numbers

Sensory bins offer a hands-on way to explore numbers. Fill a container with rice, sand, or dried beans, and bury small numbers of toys or cards inside. Provide your child with a scoop or their hands to dig and find the hidden numbers.

Once they pull out a number, they can match it to objects (e.g., pairing the number "2" with two toy cars). Sensory bins are excellent for keeping kids engaged while encouraging number recognition through exploration.

6. DIY Number Puzzle

Creating puzzles at home is a simple yet effective way to teach number recognition. Cut cardstock into pieces, with one half displaying a number and the other half showing a corresponding quantity of dots or pictures.

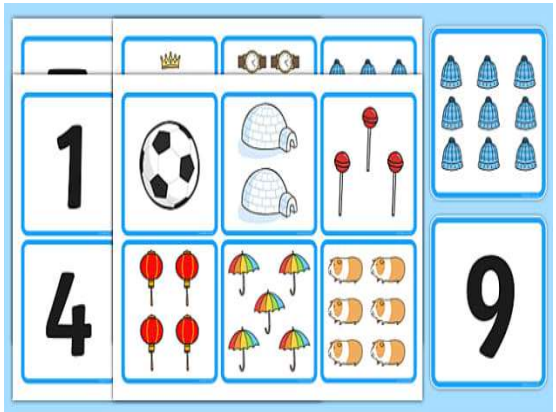
For instance, one piece might have the number “3,” while its match shows three dots. Mix up the pieces and let your child match them. This helps improve problem-solving skills while reinforcing their understanding of numbers and quantities.

7. Counting Everyday Objects

Incorporating numbers into daily routines is a natural and practical way to teach number recognition. For example, count the spoons while setting the table, or ask your child to gather three apples for a snack.

You can also count steps as you climb the stairs together. These activities help children see the real-world application of numbers and make learning part of their everyday experiences.

8. Matching Games with Cards



Use a deck of cards or create your own number-matching cards to play games like “Memory” or “Go Fish.” For Memory, lay the cards face down and have your child flip two cards at a time, trying to match numbers.

For Go Fish, they can ask for specific numbers to create pairs. These games not only teach number recognition but also improve memory and concentration.

9. Number Art and Crafts

Combine creativity with learning by making number-themed crafts. Provide materials like paper, markers, stickers, or glue. For example, draw a large number “6” on a sheet of paper and have your child decorate it with six stickers or pieces of pasta.

You can also create number collages, where kids glue cut-out pictures of objects matching the number. This activity is both fun and a great way to reinforce number concepts.

10. Number Line Activity

Kids absolutely LOVE sticky notes and it’s true! Sometimes, it’s the simplest things that capture their attention and spark their creativity. It’s amazing how these little pieces of paper can turn into hours of fun!

You’ll need some sticky notes (*post-its*) and a marker, such as a Sharpie. These simple supplies are all you need to get started!

On each sticky note, write a number. To start, focus on numbers 1–10, especially for younger preschoolers. If your child is ready for more of a challenge, expand to 1–20 or even higher, depending on their skills and interest.

Place the sticky notes randomly on a wall or surface, mixing up the order of the numbers. Then, ask your child to take the sticky notes and arrange them in numerical order on a different wall or area. This keeps things clear and helps them focus on putting the numbers in the correct sequence.

To make this activity more advanced, leave out some numbers when placing the sticky notes on the wall. Then, challenge your child to identify the missing numbers and fill in the gaps with new sticky notes. This adds an extra layer of problem-solving and makes the activity even more engaging!

https://youtu.be/CI1zArX2eHA?si=xkM1fGSuDIX-9y2Q

Activity 8.5: Teaching Learning Strategies for Foundational Numeracy for Grade 1-3, Number Operation: Recognizing/creating sequence: Numbers, Patterns, Objects, shapes, Read & Write

INSTRUCTION:

1.Work in groups and assign one strategy for each from Handout 8.5.

2.Click the links from **handout 8.5** and learn from video. And prepare those games as Hands-on activity for classroom.

3.Present your activity in front of whole class from ECCE to Grade1-3.

Handout # 8.5

Teaching Learning Strategies for Foundational Numeracy for Grade 1-3, Number Operation: Recognizing/creating sequence: Numbers, Patterns, Objects, shapes, Read & Write

(1) Multiplication & Division 3 in a Row

Concepts Covered:

- Reinforcing multiplication facts.
- Reinforcing division facts.
- Understanding the relationship between multiplication and division.
- Strategic thinking and game play.

Material Required:

- Playing board (made with pencil and paper): A 3x3 grid (like Tic-Tac-Toe).
- Counters or tokens (two different colors or symbols, one for each player).
- (Optional but Recommended) A set of number cards or dice to generate numbers for the multiplication/division problems.

Preparation (Teacher):

1. **Create the Playing Board:** Draw a 3x3 grid on a piece of paper.
2. **Fill the Squares:** In each of the 9 squares, write a **product** (the answer to a multiplication problem) or a **quotient** (the answer to a division problem) that you want the students to practice. Choose products and quotients that are appropriate for their current learning level. Examples for a focus on multiplication facts up to 10x10 and related division:

12	25	18
30	16	9

---|----|---
24 | 36 | 20

3. **(Optional) Prepare Number Cards/Dice:** Have a way for students to generate numbers to create their multiplication or division problems (e.g., a deck of cards with numbers 1-10, two dice).

How to Play:

1. **Players:** Two players take turns.
2. **Goal:** The first player to get three of their counters in a row (horizontally, vertically, or diagonally) wins.
3. **Taking a Turn:** On their turn, a player must:
    - **State a Multiplication or Division Problem:** They need to state a multiplication or division problem whose answer is one of the numbers currently uncovered on the game board.
        - **Using Number Cards/Dice (if prepared):** They might draw two cards (or roll two dice) and create a multiplication problem with those numbers, or a division problem using the product and one of the factors.
        - **Recalling Facts:** They can simply recall a multiplication or division fact that results in a number on the board.
    - **Place a Counter:** If their stated problem is correct and the corresponding square on the board is unoccupied, they place one of their counters on that square.
4. **Winning:** The first player to achieve three of their counters in a row wins the round.
5. **Multiple Rounds:** Play several rounds to reinforce the concepts.

https://youtu.be/jQorRfkknOQ?si=affGCyBzYvY25amv

(2) Card Game (Addition, Substraction, Multiplication, Division)

Concepts Covered:

- Practicing all four basic operations (addition, subtraction, multiplication, division).
- Developing mental math skills.
- Applying order of operations (PEMDAS/BODMAS).
- Strategic thinking and problem-solving.

Equipment:

- Deck of cards (Ace = 1, Jack = 11, Queen = 12, King = 13). You might remove the face cards for younger players to simplify the game, or keep them in for a challenge.

How to Play:

1. **Deal:** Each player is dealt four cards face up.
2. **The Goal:** Players must use *all four* of their cards to create a mathematical equation that equals 24. They can use any combination of addition, subtraction, multiplication, and division.
3. **Taking Turns:** Players take turns trying to make 24.
4. **Creating Equations:** Players must clearly state their equation. For example, if a player has the cards 2, 3, 8, and 4, they could say: "(8 / 4) * (3 + 2) = 24".
5. **Correctness:** If the equation is correct, the player earns a point. If incorrect, they get no points for that round.
6. **Discard and Draw:** After a successful turn (or an unsuccessful attempt), the player discards the cards they used and draws four new cards from the deck.
7. **Winning:** Play several rounds. The player with the most points at the end wins.**https://youtu.be/nHVx3tzodKc**

(3) Board Game Five in a Row

Concepts Covered:

- Reinforcing addition, subtraction, multiplication, and division.
- Developing mental math skills.
- Applying order of operations (PEMDAS/BODMAS).
- Strategic thinking and game play.

Equipment:

- Playing board (made with pencil and paper): A grid, typically 6 rows by 7 columns (like Connect Four).
- Deck of cards (Ace = 1, 2-10 as face value, Jack = 11, Queen = 12, King = 13). You can adjust face card values based on the age group.
- Counters or tokens (two different colors or symbols, one for each player).

Preparation (Teacher):

1. **Create the Playing Board:** Draw a 6x7 grid on a piece of paper.
2. **(Optional) Label Columns:** You can label the columns with numbers or letters to help with calling out moves.

How to Play:

1. **Players:** Two players take turns.
2. **Goal:** The first player to get five of their counters in a row (horizontally, vertically, or diagonally) wins.
3. **Taking a Turn:** On their turn, a player:

- **Draws Cards:** Draws two or three cards from the deck (adjust the number of cards based on the complexity you want).
- **Creates an Equation:** Uses the numbers on their drawn cards and any combination of addition (+), subtraction (-), multiplication (×), and division (÷) to create a mathematical equation.
- **Claims a Column:** The *answer* to their equation determines which column they can place their counter in. You can either:
  - **Direct Mapping:** Assign each column a target number (e.g., Column 1 = Answer 1, Column 2 = Answer 2, etc., up to Column 7). The player places their counter in the column corresponding to the answer they achieved. You'll need to pre-determine a reasonable range of target numbers for your board.
  - **Range Mapping:** Assign ranges of answers to columns (e.g., Column 1 = Answers 1-5, Column 2 = Answers 6-10, etc.). The player places their counter in the column whose range includes their answer.
- **Placement:** The counter is placed in the lowest available space in the chosen column (just like in Connect Four).

4. **Winning:** The first player to get five of their counters in a row wins the round.
5. **Multiple Rounds:** Play several rounds to reinforce the concepts.**https://youtu.be/FDTmpY1Odow**

(4) Chasing the Magic Number

Concepts Covered:

- Reinforcing addition, subtraction, multiplication, and division.
- Developing mental math skills.
- Applying order of operations (PEMDAS/BODMAS, depending on the level).
- Strategic planning and problem-solving.
- Number sense and flexibility with operations.

Equipment:

- **The Magic Number:** A target number chosen by the teacher or randomly generated (e.g., using a spinner, dice, or a number generator).
- **Starting Numbers:** A set of initial numbers provided to the players at the beginning of each round. These could be dealt from a deck of cards (Ace=1, Jack=11, Queen=12, King=13), rolled on dice, or pre-selected by the teacher. The number of starting numbers can vary (e.g., 3, 4, or 5).
- Paper and pencil for calculations (optional, depending on the level).

How to Play:

1. **The Magic Number is Revealed:** The teacher announces or reveals the "Magic Number" for the round (e.g., 25).

2. **Starting Numbers are Given:** Each player receives the same set of starting numbers (e.g., 3, 7, 2, 5).
3. **The Chase Begins:** Players individually try to use *all* of their starting numbers, combined with any of the four basic operations (+, -, ×, ÷), to reach the Magic Number.
4. **Recording Solutions:** Once a player finds a way to reach the Magic Number, they write down their equation.**https://youtu.be/HAM03vzRW6I?si=SSI7FhAnOxRyhRmD**

Day 09

Activity 9.2:Foundational Numeracy Skills Concept of Addition & Subtraction(ECCE-Grade 1)

INSTRUCTION:

1. Work in three groups and assign the topic for each from Handout 9.2 as follows.

Group 1: foundational Numeracy skills concept of Addition & Subtraction (Age 5-6 years)

Group 2: foundational Numeracy skills concept of Addition & Subtraction (Age 6-7 years)

Group 3: foundational Numeracy skills concept of Addition & Subtraction (Age 7-8 years)

2.Prepare and Present these assigned task with whole class interactively.

3.Click the links from **handout 9.2** and learn from link.

Handout # 9.2

Foundational Numeracy Skills

Concept of Addition & Subtraction

Definitions:

Addition - A mathematical operation that represents combining objects t into a larger collection. It is signified by the plus sign (+).

Subtraction - A mathematical operation that represents process of finding the difference between numbers or quantities. It is signified by the minus sign (-).

Source: **https://davenport.libguides.com/math-skills-overview/basic-operations/add-subtract**

(1) Foundational Numeracy Skills Concept of Addition & subtraction (age 5–6)

The foundational numeracy skills for both addition and subtraction are closely intertwined and build upon their developing number sense for 5to 6 year sold. Here's a breakdown of the key skills for each, keeping in mind the connections between them:

I. Shared Foundational Numeracy Skills:

These skills are essential for understanding both addition and subtraction:

- **Strong Number Sense (up to at least 10-20):**

- **Number Recognition:** Identifying and naming numerals.
  - *Example:* Recognizing the number '7' or '12'.
- **Counting:** Accurately reciting the number sequence forward and backward within their range.
  - *Example:* Counting from 1 to 10 and back, or counting from 15 to 10.
- **One-to-One Correspondence:** Understanding that each object counted represents one number.
  - *Example:* Touching each block once while counting a group of blocks.
- **Cardinality:** Knowing the last number counted represents the total.
  - *Example:* Understanding that after counting 8 stickers, there are *eight* stickers.
- **Subitizing (for small quantities):** Instantly recognizing the number of items in a small group (up to 3-4).
  - *Example:* Immediately knowing there are 3 dots on a die.
- **Number Comparison:** Determining which of two numbers is greater or smaller.
  - *Example:* Knowing that 6 is more than 3.
- **Understanding "One More" and "One Less":** Identifying the number that comes immediately after or before a given number.
  - *Example:* Knowing that one more than 5 is 6, and one less than 4 is 3.

II. Foundational Numeracy Skills Specific to Addition:

- **Understanding Addition as Combining:** Recognizing that addition joins two or more groups to find a total.
  - *Example:* If you have 2 apples and get 1 more, you are putting the groups together.
- **Developing Basic Addition Strategies:**
  - **Counting All:** Counting all the objects from both sets to find the sum.
    - *Example:* For 2 + 3, counting "one, two, three, four, five."
  - **Counting On:** Starting with one number and counting up the other. Often starting with the larger number is easier.
    - *Example:* For 4 + 1, starting at 4 and counting "five."
- **Understanding the Language of Addition (Introduction):** Hearing and starting to use words like "add," "plus," "and," "altogether," "total."
  - *Example:* "Two *and* one *altogether* makes three."

III. Foundational Numeracy Skills Specific to Subtraction:

- **Understanding Subtraction as Taking Away:** Recognizing that subtraction means removing objects from a group to find how many are left.
    - *Example:* If you have 5 cookies and eat 2, you are taking some away.
- **Developing Basic Subtraction Strategies:**
    - **Taking Away (Direct Modeling):** Physically removing objects from a set and counting the remainder.
        - *Example:* Starting with 4 blocks and taking away 1, then counting the remaining 3.
    - **Counting Back:** Starting with the larger number and counting backward the number being subtracted.
        - *Example:* For 5 - 2, starting at 5 and counting back "four, three."
- **Understanding the Language of Subtraction (Introduction):** Hearing and starting to use words like "take away," "minus," "subtract," "left," "difference."
    - *Example:* "Five *take away* two leaves three."

Connecting Addition and Subtraction:

- **Understanding the Relationship (Informal):** Beginning to see that addition and subtraction are related. For example, if you add some and then take the same amount away, you end up where you started.
    - *Example:* "I had 3 blocks, then I got 2 more (now I have 5). Then I gave 2 away (now I have 3 again)."

Examples of Activities for 5-6 Year Olds:

- **Using Manipulatives:** Using blocks, counters, toys, or fingers to physically act out both addition and subtraction problems.
    - *Addition:* Combining two small groups of objects and counting the total.
    - *Subtraction:* Starting with a small group of objects and removing some, then counting what's left.
- **Story Problems:** Creating simple word problems that involve adding or taking away in familiar contexts.
    - *Addition:* "There were 2 birds on a tree, and 1 more flew over. How many birds are there now?"
    - *Subtraction:* "You had 4 balloons, and one popped. How many balloons do you have left?"
- **Number Line Activities (Introduction):** Using a number line to move forward for addition and backward for subtraction with small numbers.
- **"One More, One Less" Games:** Asking what is one more or one less than a given number and relating it to adding or subtracting one.

- **Part-Part-Whole Activities:** Exploring how a whole number can be made of two parts (addition) and how taking away one part leaves the other (subtraction).

(2)Foundational Numeracy Skills concept of Addition & subtraction (age 6–7)

The foundational numeracy skills for addition and subtraction become more sophisticated, focusing on fluency, efficiency, and understanding the relationship between the two operations. Here's a breakdown:

I. Enhanced Number Sense (Building on Previous Skills):

- **Number Recognition and Fluency:** Quickly and accurately identifying numerals up to 20 and beyond, and starting to recognize numbers up to 100.
- **Confident Counting:**
    - Counting forward and backward fluently within 100, starting from any number.
    - Counting in multiples of 2, 3, 5, and 10.
- **Place Value (Introduction and Solidification):** Understanding that the position of a digit represents its value (tens and ones).
    - *Example:* Knowing that in the number 27, the '2' represents 20 (two tens) and the '7' represents 7 (seven ones).
- **Number Comparison (with symbols):** Confidently using greater than (>), less than (<), and equals (=) symbols to compare numbers within 100.
- **Mental Math Strategies for "More Than" and "Less Than":** Quickly finding numbers that are one, ten more or less than a given number.
    - *Example:* Knowing that ten more than 34 is 44, and one less than 52 is 51.
- **Number Bonds to 20:** Knowing by heart the pairs of numbers that add up to 20. This is crucial for mental addition and subtraction.
    - *Example:* Knowing that 7 + 13 = 20, 15 + 5 = 20, etc.

II. Addition Skills:

- **Fluent Addition within 20:** Recalling basic addition facts within 20 quickly and accurately.
- **Adding a One-Digit Number to a Two-Digit Number (mentally and with manipulatives):**
    - *Example:* 34 + 5 = 39
- **Adding Tens to a Two-Digit Number (mentally and with manipulatives):**
    - *Example:* 42 + 20 = 62
- **Adding Two Two-Digit Numbers (using various strategies):**
    - **Counting on in tens and ones:** 32 + 25 = 32 + 10 + 10 + 1 + 1 + 1 + 1 + 1 = 57

    - **Partitioning:** 32 + 25 = (30 + 2) + (20 + 5) = 30 + 20 + 2 + 5 = 50 + 7 = 57
    - **Using a number line:** Jumping forward in tens and then ones.
- **Adding Three One-Digit Numbers:**
    - *Example:* 4 + 7 + 2 = (4 + 2) + 7 = 6 + 7 = 13 (using the associative property informally)
- **Understanding the Commutative Property:** Knowing that the order of addends doesn't change the sum (e.g., 8 + 5 = 5 + 8).
- **Using the "+" and "=" Symbols Correctly:** Understanding and writing addition sentences.

III. Subtraction Skills:

- **Fluent Subtraction within 20:** Recalling basic subtraction facts within 20 quickly and accurately (related to their knowledge of addition facts).
- **Subtracting a One-Digit Number from a Two-Digit Number (mentally and with manipulatives):**
    - *Example:* 28 - 6 = 22
- **Subtracting Tens from a Two-Digit Number (mentally and with manipulatives):**
    - *Example:* 57 - 30 = 27
- **Subtracting a One-Digit Number from a Two-Digit Number (bridging ten):**
    - *Example:* 32 - 5 = 32 - 2 - 3 = 30 - 3 = 27
- **Subtracting Two Two-Digit Numbers (using various strategies):**
    - **Counting back in tens and ones:** 48 - 23 = 48 - 10 - 10 - 1 - 1 - 1 = 25
    - **Partitioning:** 48 - 23 = (40 + 8) - (20 + 3) = 40 - 20 + 8 - 3 = 20 + 5 = 25
    - **Finding the difference on a number line:** Counting the jumps between the two numbers.
- **Understanding Subtraction as "Taking Away" and "Finding the Difference".**
- **Using the "–" and "=" Symbols Correctly:** Understanding and writing subtraction sentences.

IV. Connecting Addition and Subtraction:

- **Understanding the Inverse Relationship:** Recognizing that addition and subtraction are opposite operations and can be used to check each other.
    - *Example:* If 7 + 5 = 12, then 12 - 5 = 7 and 12 - 7 = 5.
- **Solving Missing Number Problems:** Using the inverse relationship to find missing addends or subtrahends.
    - *Example:* 8 + ___ = 13 (thinking 13 - 8 = ?) or ___ - 4 = 9 (thinking 9 + 4 = ?).

V. Problem Solving:

- Solving simple one-step word problems involving both addition and subtraction in real-life contexts.
- Identifying the operation needed to solve a problem based on the language used (e.g., "in total," "how many left," "difference").

Examples of Activities:

- **Number Bond Games:** Using cards or dominoes to find pairs that make a target number (e.g., making 10, making 20).
- **"Roll and Add/Subtract" Games:** Using dice to generate numbers to add or subtract.
- **Using Manipulatives:** Employing objects like counters, blocks, and number lines to model addition and subtraction.
- **Story Problems:** Creating and solving simple word problems together.
- **Missing Number Puzzles:** Solving equations with a missing addend, subtrahend, or sum/difference.
- **Card Games:** Playing games like "Snap" or "Memory" with addition/subtraction facts.
- **Real-Life Scenarios:** Involving children in everyday situations that require addition and subtraction (e.g., counting out snacks, figuring out how many toys are left after sharing).

(3)Foundational Numeracy Skills Concept of Addition & subtraction (age 7–8)

The foundational numeracy skills for addition and subtraction focus on building fluency with larger numbers, introducing formal written methods, and deepening their understanding of the relationship between the two operations. Here's a breakdown of the key skills:

I. Number Sense and Place Value (Extending from Previous Years):

- **Place Value to 1000:** Understanding the value of each digit in three-digit numbers (hundreds, tens, and ones).
    - *Example:* Knowing that in 345, the '3' represents 300, the '4' represents 40, and the '5' represents 5.
- **Counting:**
    - Counting forward and backward in steps of 1, 10, and 100 up to 1000.
    - Counting in steps of 4, 8, 50, and 100.
- **Number Comparison and Ordering:** Comparing and ordering numbers up to 1000 using <, >, and = symbols.
- **Finding 10 or 100 More or Less:** Quickly identifying these amounts for three-digit numbers.
    - *Example:* 456 + 10 = 466, 456 - 100 = 356.
- **Partitioning:** Breaking down numbers into their place value components.
    - *Example:* 672 = 600 + 70 + 2.

II. Addition Skills:

- **Adding Numbers with Up to Three Digits:**
    - **Mental Strategies:**
        - Adding multiples of 1, 10, and 100 to three-digit numbers (e.g., 234 + 7, 534 + 20, 635 + 300).
        - Partitioning numbers to add (e.g., 243 + 65 = 200 + 40 + 3 + 60 + 5 = 200 + 100 + 8 = 308).
        - Using near doubles (e.g., 76 + 77 is close to 76 + 76).
    - **Formal Written Methods:**
        - **Column Addition:** Adding numbers with up to three digits using the standard algorithm, including carrying (regrouping).
- **Estimating and Checking:**
    - Estimating the answer to an addition problem before calculating.
    - Checking answers using the inverse operation (subtraction).
- **Problem Solving:** Solving one- and two-step word problems involving addition with numbers up to three digits.

III. Subtraction Skills:

- **Subtracting Numbers with Up to Three Digits:**
    - **Mental Strategies:**
        - Subtracting multiples of 1, 10, and 100 from three-digit numbers.
        - Counting back in tens and ones.
        - Finding the difference by counting up (for numbers close together).
    - **Formal Written Methods:**
        - **Column Subtraction:** Subtracting numbers with up to three digits using the standard algorithm, including borrowing (regrouping).
- **Estimating and Checking:**
    - Estimating the answer to a subtraction problem before calculating.
    - Checking answers using the inverse operation (addition).
- **Problem Solving:** Solving one- and two-step word problems involving subtraction with numbers up to three digits.

IV. Connecting Addition and Subtraction:

- **Understanding Inverse Operations:** Recognizing that addition and subtraction undo each other.
- **Using Inverse Operations to Check Answers:** Applying this understanding to verify calculations.
- **Solving Missing Number Problems:** Finding missing addends or subtrahends (e.g., 25 + ___ = 42, 63 - ___ = 21, ___ - 18 = 35).

V. Mathematical Language and Reasoning:

- Using appropriate mathematical vocabulary related to addition and subtraction (e.g., add, sum, total, subtract, difference, minus, more than, less than).
- Explaining the methods used to solve problems and why particular strategies were chosen.

Examples of Activities:

- **Using manipulatives:** Base-ten blocks, counters, and number lines to model addition and subtraction.
- **Number bond activities:** Exploring the relationship between three numbers (e.g., 8 + 7 = 15, 15 - 7 = 8, 15 - 8 = 7).
- **Word problems:** Solving real-life scenarios that require addition or subtraction.
- **Estimation games:** Estimating sums and differences before calculating.
- **Checking calculations:** Using the inverse operation to verify answers.
- **Missing number puzzles:** Solving equations with missing values.
- **Board games and card games:** Incorporating addition and subtraction in a fun and engaging way.

Activity 9.3:Foundational Numeracy Skills Concept of Multiplication/Division: two or three-digit numbers for Grade 2 & 3

INSTRUCTION:

1. 1.Divide the class in four groups and distribute the **handout 9.3** among four groups for reading and discussion as follows.

Group 1& 2:Grade 2: Focus on Conceptual Understanding (Largely Single-Digit with Introduction to Multiples/Division)

Group 3&4:Grade 3: Building Fluency and Introducing More Formal Concepts multiplication /Division 2and 3 digits

2. Ask participants to note the key points from the handout according to their understanding, and prepare activities of assigned task and share with whole class.

3.Conclude the activities with suitable comments.

Handout # 9.3

Multiplication/Division: two or three-digit numbers

Definition

Multiplication

- It is a mathematical operation that indicates how many times a number is added to itself. It is signified by the multiplication signs (x) or (*).

Source: https://davenport.libguides.com

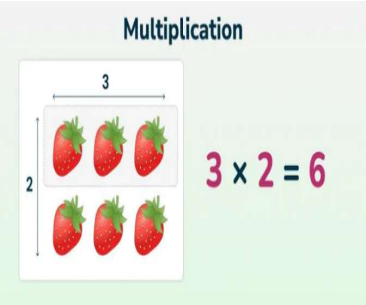
the foundational numeracy skills for multiplication and division with two and three-digit numbers for Grade 2 and Grade 3. It's important to note that the focus in these grades is on building the *concept* and initial understanding, rather than complex calculations with larger numbers.

Grade 2: Focus on Conceptual Understanding (Largely Single-Digit with Introduction to Multiples/Division)

At this stage, the focus is on understanding what multiplication and division *mean* through concrete experiences and visual representations. Two and three-digit numbers are primarily involved as the *result* of multiplication or the *starting point* for division in simpler contexts.

Multiplication (Conceptual Introduction):

- **Understanding Multiplication as Repeated Addition:**
  - *Skill:* Recognizing that multiplication is a shortcut for adding the same number multiple times.
  - *Examples:*
    - Seeing 3 groups of 2 apples and understanding it's the same as 2 + 2 + 2.
    - Relating "4 times 5" to adding 5 four times (5 + 5 + 5 + 5).
- **Using Arrays and Equal Groups:**
  - *Skill:* Representing multiplication using arrays (rows and columns of objects) and understanding the concept of equal groups.
  - *Examples:*
    - Arranging 2 rows of 4 stickers to visualize 2 x 4.
    - Dividing a collection of 6 pencils into 3 equal groups of 2.
- **Introduction to Multiplication Facts (Focus on x2, x5, x10):**
  - *Skill:* Beginning to recall simple multiplication facts.
  - *Examples:*
    - Knowing that 2 x 3 = 6.
    - Counting in multiples of 5 (5, 10, 15...).
    - Understanding that multiplying by 10 adds a zero (e.g., 3 x 10 = 30).
- **Relating Multiplication to Real-World Scenarios:**



- *Skill:* Identifying situations where multiplication can be used.
- *Examples:*
  - "If each child has 3 cookies and there are 4 children, how many cookies are there in total?"

Division (Conceptual Introduction):

- **Understanding Division as Sharing Equally:**
  - *Skill:* Recognizing that division involves splitting a total number of items into equal groups.
  - *Examples:*
    - Sharing 6 cookies equally among 3 friends (each friend gets 2).
- **Understanding Division as Grouping:**
  - *Skill:* Recognizing that division can also mean finding out how many equal groups of a certain size can be made from a total.
  - *Examples:*
    - Having 10 pencils and making groups of 2 pencils each (you can make 5 groups).
- **Relating Division to Multiplication (Inverse Relationship - informally):**
  - *Skill:* Starting to see the connection between multiplication and division.
  - *Examples:*
    - If 2 x 3 = 6, then 6 divided by 3 is 2, and 6 divided by 2 is 3.
- **Introduction to Simple Division Facts (Related to x2, x5, x10):**
  - *Skill:* Beginning to recall simple division facts.
  - *Examples:*
    - Knowing that 8 divided by 2 is 4.
    - Understanding that 15 divided by 5 is 3.
    - Relating division by 10 to removing a zero (e.g., 30 divided by 10 is 3).
- **Relating Division to Real-World Scenarios:**
  - *Skill:* Identifying situations where division can be used.
  - *Examples:*
    - "If you have 12 stickers and want to share them equally among 4 friends, how many will each friend get?"

Two and Three-Digit Numbers in Grade 2 (Contextual):

- Seeing the *results* of multiplication (e.g., 10 x 5 = 50, 3 x 10 = 30).
- Starting with two or three-digit numbers for simple division by single-digit numbers where the division is straightforward without remainders (e.g., sharing 20 pencils among 10 students, dividing 30 by 3).

Grade 3: Building Fluency and Introducing More Formal Concepts multiplication /Division 2and 3 digits

Building Fluency and Introducing More Formal Concepts

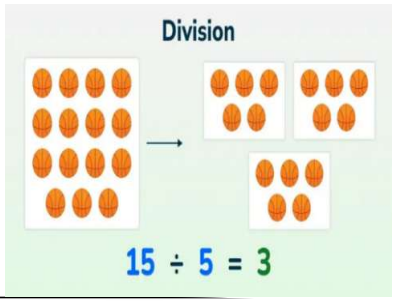
In Grade 3, the focus shifts towards developing more fluency with multiplication facts and introducing more systematic approaches to multiplication and division, still primarily with single-digit multipliers and divisors, but with two and three-digit dividends/multiplicands.

Multiplication:

- **Fluency with Multiplication Facts (up to x10):**
    - *Skill:* Recalling multiplication facts quickly and accurately.
- **Multiplying Two-Digit Numbers by a Single-Digit Number:**
    - *Skill:* Using strategies like partitioning to multiply.
    - *Examples:*
        - 13 x 3 = (10 x 3) + (3 x 3) = 30 + 9 = 39.
        - Using arrays to visualize (e.g., 12 rows of 4).
- **Understanding the Properties of Multiplication:**
    - *Commutative Property:* Knowing that the order doesn't change the result (e.g., 4 x 6 = 6 x 4).
    - *Associative Property (Informally):* Understanding that the way numbers are grouped doesn't change the result (e.g., (2 x 3) x 4 = 2 x (3 x 4)).
- **Multiplying by Multiples of 10:**
    - *Skill:* Multiplying by 10, 20, 30...
    - *Examples:*
        - 4 x 20 = 4 x (2 x 10) = (4 x 2) x 10 = 8 x 10 = 80.
- **Solving Multiplication Word Problems (including two-digit by single-digit):**

Division:

- **Fluency with Division Facts (related to multiplication facts up to x10):**
    - *Skill:* Recalling division facts quickly and accurately.
- **Dividing Two-Digit Numbers by a Single-Digit Number (without remainders initially):**
    - *Skill:* Using strategies like sharing and grouping.
    - *Examples:*
        - Dividing 15 by 3(sharing 15 items into 3 equal groups
        - Dividing 24 by 3 (sharing 24 items into 3 equal groups).



        - Dividing 35 by 5 (making groups of 5 from 35 items).
- **Introduction to Division with Remainders:**
    - *Skill:* Understanding that sometimes a number cannot be divided equally, resulting in a remainder.
    - *Examples:*
        - Dividing 13 by 2 (6 groups with 1 left over).
- **Relating Division to Multiplication (Inverse Relationship - explicitly):**
    - *Skill:* Using multiplication facts to solve division problems.
- **Solving Division Word Problems (including two-digit divided by single-digit):**

Two and Three-Digit Numbers in Grade 3:

- Multiplying single-digit numbers resulting in two or three-digit numbers (e.g., 8 x 12 = 96, 7 x 25 = 175).
- Dividing two-digit numbers by single-digit numbers.
- Starting to divide three-digit numbers by a single-digit number where the division is relatively straightforward (often involving multiples of the divisor).
    - *Example:* 600 divided by 3, 450 divided by 5.

Key Foundational Skills Across Both Grades:

- **Strong Number Sense:** A solid understanding of the value of numbers.
- **Counting Skills:** Fluent counting in various steps.
- **Understanding Equal Groups:** The core concept behind both multiplication and division.
- **Visual Representation:** Using arrays, drawings, and manipulatives to understand the operations.
- **Problem-Solving:** Applying the concepts to real-world situations.
- **Mathematical Language:** Understanding and using terms like "multiply," "times," "divide," "share," "groups of," "product," "quotient," "remainder."

Source: https://byjus.com
https://davenport.libguides.com/math-skills-overview/basic-operations/multiplydivide#:~text=Multiplication%20%2D%20A%20
Source: https://www.geeksforgeeks.org

Activity 9.4:Teaching Learning Foundational Numeracy Through Fun: Addition/Subtraction/ Multiplication and Division

INSTRUCTION:

1.Work in groups and assign one strategy for each from Handout 9.3.

2.Read and discuss **handout 9.4** and practice the Hands-on activity for classroom from Handout .

3.Sing poem my ten fingers with rhyme from handout 9.4. prepare hands-on activities given in handout.

3.Present your activity in front of whole class from ECCE - Grade1-3.

Handout # 9.4

Learning Foundational Numeracy Through Fun

Fun Activities: Help Child to develop Foundational Numeracy Skills.

Mathematics is one of the essential subjects that children learn in school. It plays a crucial role in their daily lives, from counting money to measuring ingredients when cooking. Developing foundational math skills is necessary for success in higher education and in life.

Activity 1: Counting with Everyday Objects

One of the easiest and most effective ways to help your child develop math skills is by counting with everyday objects. You can start by counting the number of toys in their room, the number of steps on the stairs, or the number of apples in a bag. As your child becomes more confident, you can move on to more challenging objects, such as counting the number of chairs in a room or the number of cars in a parking lot.

Activity 2: Playing Math Games

Playing math games is an excellent way to make math fun for your child. Games like Uno, Yahtzee, and Monopoly can teach your child addition, subtraction, multiplication, and division skills in a fun and engaging way. You can also find many math games online or create your own games at home.

Activity 3: Baking and Measuring Ingredients

Baking is a great way to teach your child about fractions and measurements. You can ask them to measure the ingredients, count the number of eggs, and divide the dough into equal portions. Not only will your child learn valuable math skills, but they'll also get to enjoy a tasty treat at the end.

Activity 4: Sorting and Classifying Objects

Sorting and classifying objects can help your child develop critical thinking and problem-solving skills. You can ask your child to sort their toys by color, size, or shape, or to classify

objects based on their use. This activity can also help your child develop language and vocabulary skills.

Activity 5: Drawing Shapes and Patterns

Drawing shapes and patterns can help your child develop spatial awareness and geometry skills. You can ask them to draw shapes like circles, squares, and triangles or to create more complex patterns using different shapes and colors.

Activity 6: Building with Blocks

Building with blocks is an excellent way to teach your child about spatial awareness, geometry, and problem-solving skills. You can ask your child to build a tower using different shapes and sizes of blocks or to create a structure using only a specific number of blocks.

Activity 7: Playing Store

Playing store can teach your child valuable math skills, such as addition, subtraction, and counting money. You can ask your child to set up a store with items they already have at home and then pretend to buy and sell items using play money.

Activity 8: Creating a Calendar

Creating a calendar can help your child develop time-telling and counting skills. You can ask them to draw a calendar and mark important dates, such as birthdays and holidays.

Activity 9: Telling Time

Telling time is a crucial skill that your child will use throughout their life. You can teach your child how to tell time using an analog clock by asking them to identify the hour and minute hands. You can also create a daily routine that involves checking the time, such as setting a timer for a specific activity or having a designated time for meals.

Activity 10: Using Math Apps and Websites

There are many math apps and websites available that can make learning math fun and engaging for your child. Some popular math apps include Mathletics, Splash Learn, and Khan Academy Kids. These apps offer a variety of math activities, games, and videos that can help your child build foundational math skills.

Source: https://mrsmyersrr.com

Learning Foundational Numeracy Skill Through Rhymes

Through rhymes, children learn to anticipate the next rhyme or verse, which helps them develop the ability to recognize and predict patterns—a fundamental skill in mathematics. Nursery rhymes often contain rich vocabulary and imagery, which can stimulate cognitive development in young children.

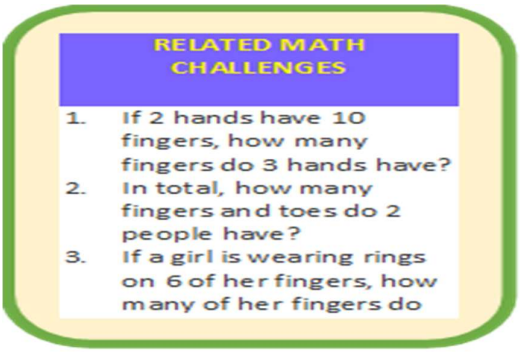
Source: https://readychild.org/joyful-learning-with-nursery-rhymes

Nursery rhymes are also full of numbers, patterns, sequencing and counting forward and backward. Children learn to add as they count forward and subtract as they count backward. Some rhymes add “one more” or “one less” as the rhyme progresses. Rhymes that involve finger counting do more than develop fine-motor skills. They also teach children that fingers can represent numbers when the children are holding their fingers up and counting on their fingers. These patterns lay the foundation for mathematical predictions and reasoning skills. The practice of finger play promotes the development of coordination and fine-motor skills

in young children—skills that are critical for tasks such as holding a pencil when children enter elementary school.

Source: https://earlymathcounts.org

My Ten Fingers!
If I didn't have 10 fingers,
I couldn't count to 10...
I always use my fingers,
They're better than a pen!
If I didn't have 10 fingers,
I couldn't even add,
Without my trusty fingers,
My math is really sad!
I use those handy fingers,
Don't go and ask me why,
I use those handy fingers,
Like stars light-up the sky!!!
But now my teach is saying,
Do it in my head!
If fingers are forbidden,
I'll use my toes instead!


RELATED MATH CHALLENGES
1. If 2 hands have 10 fingers, how many fingers do 3 hands have?
2. In total, how many fingers and toes do 2 people have?
3. If a girl is wearing rings on 6 of her fingers, how many of her fingers do

For more math rhymes visit: https://mathstory.com/math-poems-page/

Activity 9.5:Teaching Learning Strategies of Foundational Numeracy Addition/Subtraction/ Multiplication and Division in Mono-grade & Multi-grade Classroom through hands on Activities

INSTRUCTION:

1.Work in groups and assign one strategy for each from Handout 9.5.

2.Read and discuss **handout 9.5** and practice the Hands-on activity for classroom from Handout .prepare presentation and share with whole class.

Handout # 9.5

Teaching and Learning Strategies of Foundational Numeracy

7 Effective Strategies for Teaching Basic Math

- Make it hands-on. ...
- Use visuals and images. ...
- Find opportunities to differentiate learning. ...
- Ask students to explain their ideas. ...
- Incorporate storytelling to make connections to real-world scenarios. ...
- Show and tell new concepts. ...
- Let your students regularly know how they're doing.

Source: https://mathseeds.com

Tips to teach number operation to children

In order to address the previous problems, it is essential to promote the teaching of math in an accessible, relevant, and attractive way for students. We can achieve this through the incorporation of educational platforms, interactive games, application to real world scenarios during lessons…

Here we have several tips that can help you teach two basic mathematical operations to children: addition and subtraction.

1. **Visualization through drawings:** Utilize simple drawings and graphics to represent addition and subtraction problems. For example, draw apples to represent the amount of fruit in a box then add or subtract apples in order to resolve problems.

2. **Mathematical tales:** Look for tales and stories that include addition and subtraction.

3. **Tables and graphics:** Use simple tables and graphics to help children organize the information from addition and subtraction problems. This will help them visualize and resolve the problems in a more effective manner.

4. **Incorporate the use of technology:** educational applications and online games can be useful to practice addition and subtraction in an interactive way. In addition, these tools can provide feedback instantly, which helps children correct errors and strengthen their skills.

Play dice games

There are lots of ways you can encourage your child to solve addition and subtraction problems practically – all you need are two dice.

In school, they will be taught that addition is when we add two groups of objects together or when we have an amount to start with and then add more to it, making the total increase. You could play a game where each player rolls two dice and has to find the total. The winner is the player who has the largest total.

You could use similar games for subtraction. For example:

1. Write out the numbers 1 to 10 two times, making 20 separate number cards
2. Turn the cards face down and pick one at random. This is the number you are going to try to make.
3. Now, take it in turns to pick up cards. Add each card you pick up together until you get to the target number. If you go too high, you can use your turn to put back one of the cards you have picked up, face down.
4. When a player reaches the target number, they win!

Focus on subtraction

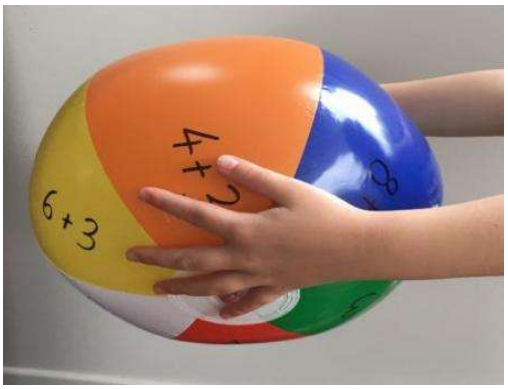
Your child will be expected to know subtraction facts up to 10. They will begin by subtracting one from a set of objects and noticing that the set has decreased in size. Encourage your child to relate subtraction to taking away by showing them how it works in everyday situations.

For example, if your child has a handful of raisins, ask them how many they have. When they have eaten one, ask them how many they now have left. Do they have more raisins or fewer raisins? What happens if you eat two raisins at the same time? Using real objects or

drawings and removing the ones that you want to subtract helps your child to visualize what subtracting really means.

Play Addition Catch

Using a beach ball, write simple addition number sentences on the ball. Students throw the ball to each other and pick a number sentence close to one of their hands to answer. As a fun alternative, play a class game of catch, time how long it takes for every student to catch and answer a problem.



Ladybug Addition Activity

Print this ladybug addition and subtraction template, and cut out the black dots and number cards for a great addition activity played with dice. Students can roll two dice or pick two number cards to create a number sentence.

They then place the black dots on the ladybug to show the answer to the addition number sentence.

Use Beads and Cards for Adding

This addition activity can be varied to suit the resources you have available to you. We used a deck of cards, but you could also use two dice depending on the skill level of your students. In the activity, students pull two cards from a deck of cards. They then thread the beads onto the pipe cleaner to show the two numbers. The students then have concrete objects to count to figure out the answer to the number sentences.

Source: https://www.teachstarter.com

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Day 10

Activity 10.3:Time: Telling time & Reading to nearest minute, Money: counting money (Shopping & Finance) Supported with Socio-Emotional Skills

Activity "The Mini Market"

INSTRUCTION:

1.Work in groups and assign strategy from Handout 10.3.

2.Read and discuss **handout 10.3** and practice the Hands-on activity of Mini Market for classroom from Handout .prepare and present this activity with coordination and collaboration with the help of whole class.

Handout # 10.3

Time: Telling time & Reading to nearest minute, Money: counting money (Shopping & Finance) Supported with Socio-Emotional Skills

Activity "The Mini Market"

Goal: To simulate a real-life shopping experience, teaching children about money, pricing, and customer interaction and estimation of time.

Materials:

- **Play Money:** A variety of play bills and coins.
- **Items to Sell:**
  - These can be toys, books, art supplies, or even homemade crafts.
  - You can also use empty food containers (cleaned) or pictures of items.
- **Price Tags:** Label each item with a clear price.
- **"Shopping Bags" or Baskets:** For children to carry their purchases.
- **A "Cash Register" (optional):** This can be a toy cash register or a simple box for holding money.
- **"Open/Closed" Sign:** Adds to the realistic feel with the open and close time.

Setup:

1. **Create the Market:** Set up a "stall" or area where the items will be displayed.
2. **Price the Items:** Assign realistic prices to the items, keeping in mind the children's age and math skills.

3. **Organize the Money:** Distribute play money to the children.
4. **Assign Roles:**
    - **Some children can be "sellers" and others "buyers."**
    - **Rotate roles so everyone gets a chance to experience both.**

Activity:

1. **Shopping Time:**
    - The "buyers" browse the market and choose items they want to purchase.
    - They calculate the total cost of their items.
2. **Making a Purchase:**
    - The "buyers" approach the "sellers" and pay for their items using play money.
    - The "sellers" count the money and provide change if needed.
3. **Role Reversal:** After a set time, switch roles so everyone has a chance to be a seller and a buyer.
4. **Learning Points:**
    - Discuss the concept of "needs" versus "wants."
    - Talk about how money is earned and spent.
    - Discuss how to count change.

Variations:

- **Theme Days:** Have themed market days (e.g., "Toy Market," "Book Market," "Craft Market").
- **"Sale" Days:** Introduce sales and discounts to add complexity.
- **"Budgeting":** Give each child a specific amount of money and challenge them to buy within their budget.
- **"Homemade Items":** Have the children create items to sell, such as drawings or crafts.
- **Team Work:** have groups of children work together to run a stall.

Educational Benefits:

- Develops math skills (counting, addition, subtraction).
- Enhances social skills (communication, negotiation).
- Introduces basic economic concepts.
- Promotes problem-solving and decision-making.
- Improves fine motor skills when handling money.

This activity is a fun and interactive way for children to learn valuable life skills while having a great time.

Handout # 10.4

Foundational Numeracy Through Play; hands on experience for searching links

INSTRUCTION:

1. .Divide the participants in groups and each group will be assigned to search different links to explore and discuss the teaching learning games for foundational numeracy skill according to the level from ECCE to grade 1-3.
2. Every group will share their understanding about the assigned task and develop games with reference to given links.
3. Ask Participants to choose any poem related to foundational Numeracy and present in-front of whole class.

Foundational Numeracy Through Play; hands on experience for searching links some helpful links to teaching and learning games for foundational numeracy skills, categorized by level, from Early Childhood Care and Education (ECCE) up to Grade 3.

General Resources with Activities Spanning Multiple Levels:

- **NRICH (University of Cambridge):** This website offers a vast collection of engaging mathematical problems, games, and activities categorized by age group. You can filter by topic (e.g., counting, number sense, addition, subtraction, multiplication, division).
    - **Link:** https://nrich.maths.org/
- **Topmarks:** A popular UK website with interactive math games and activities suitable for various age groups and skill levels. You can filter by age and topic.
    - **Link:** https://www.topmarks.co.uk/maths-games/
- **Math Playground:** Offers a wide range of fun and engaging math games, logic puzzles, and problem-solving activities.
    - **Link:** https://www.mathplayground.com/
- **Education.com:** Provides printable worksheets, online games, and activities covering foundational numeracy skills. You can filter by grade level.
    - **Link:** https://www.education.com/games/math/
- **ABCya!:** Features educational games for elementary-aged children, covering various math topics.
    - **Link:** https://www.abcya.com/games/category/numbers

ECCE (Early Childhood: Roughly Ages 3-5):

Focus: Number recognition, counting, one-to-one correspondence, basic shapes, and patterns.

- **Starfall:** Offers free, engaging, and multisensory activities for learning the alphabet and basic math concepts.
    - **Math Link:** https://www.starfall.com/h/math1/index.htm
- **Learning 4 Kids:** Provides hands-on activity ideas for early math skills. While not strictly games, these are playful learning experiences.
    - **Math Activities Link:** https://www.learning4kids.net/category/maths/
- **Early Learning Ideas:** Offers simple and fun math activities for preschoolers.
    - **Math Activities Link:** https://earlylearningideas.com/math-activities-for-preschoolers/

Grade 1 (Roughly Ages 6-7):

Focus: Counting to 100, place value (tens and ones), addition and subtraction within 20, basic shapes, and time.

- **Topmarks - Counting Games:** https://www.topmarks.co.uk/maths-games/5-7-years/counting
- **Topmarks - Addition and Subtraction Games:** https://www.topmarks.co.uk/maths-games/5-7-years/addition-and-subtraction
- **Math Playground - Grade 1 Games:** https://www.mathplayground.com/grade_1_games.html
- **Education.com - Grade 1 Math Games:** https://www.education.com/games/grade-1/math/

Grade 2 (Roughly Ages 7-8):

Focus: Counting beyond 100, place value (hundreds, tens, ones), addition and subtraction within 100, introduction to multiplication and division (equal groups), basic fractions, and measurement.

- **Topmarks - Counting Games (Ages 7-11):** https://www.topmarks.co.uk/maths-games/7-11-years/counting (Filter for appropriate level)
- **Topmarks - Addition and Subtraction Games (Ages 7-11):** https://www.topmarks.co.uk/maths-games/7-11-years/addition-and-subtraction (Filter for appropriate level)
- **Topmarks - Multiplication and Division Games (Ages 7-11):** https://www.topmarks.co.uk/maths-games/7-11-years/multiplication-and-division (Focus on early concepts)
- **Math Playground - Grade 2 Games:** https://www.mathplayground.com/grade_2_games.html
- **Education.com - Grade 2 Math Games:** https://www.education.com/games/grade-2/math/

Grade 3 (Roughly Ages 8-9):

Focus: Counting to 1000, place value, addition and subtraction with larger numbers, multiplication facts (up to 10x10), division with remainders, fractions, measurement, and geometry.

- **Topmarks - Multiplication and Division Games (Ages 7-11):** https://www.topmarks.co.uk/maths-games/7-11-years/multiplication-and-division
- **Math Playground - Grade 3 Games:** https://www.mathplayground.com/grade_3_games.html
- **Education.com - Grade 3 Math Games:** https://www.education.com/games/grade-3/math/
- **BBC Bitesize - Primary Maths (relevant sections for each grade):** https://www.bbc.co.uk/bitesize/primary/maths/ (Navigate to the appropriate year group)

Activity 10.5:Teaching and Learning Strategies of Foundational Numeracy: 'Place Value, Time and Money' in Monograde & Multi-grade Classroom through Play

INSTRUCTION:

1.Work in groups and assign each group will be assigned to search different links to explore and discuss the teaching learning games for foundational numeracy skill according to the level from ECCE to grade 1-3. from Handout 10.5.

2.Read and discuss **handout 10.5** and practice the Hands-on activities for classroom from Handout .prepare and present these activities with coordination and collaboration with the help of whole class.

3.Chose any poem related to foundational Numeracy and present in-front of whole class.

Handout # 10.5

Teaching and Learning Strategies of Foundational Numeracy: 'Place Value, Time and Money' in Monograde & Multi-grade Classroom through Play

A. Strategies of Place Value: **T**eaching place value effectively requires a blend of concrete, pictorial, and abstract approaches. Here's a breakdown of strategies to help students grasp this fundamental concept: https://youtu.be/2KsY7-qLmd0

1. Concrete Manipulatives:

- **Base-10 Blocks:** These are essential. Use unit cubes (ones), rods (tens), flats (hundreds), and cubes (thousands) to physically represent numbers. Students can build numbers, decompose them, and visually understand the relationships between place values.
- **Other Manipulatives:** Beans, counters, and other objects can be grouped into tens and ones to demonstrate the concept.

2. Pictorial Representations:

- **Place Value Charts:** Use charts with columns labeled ones, tens, hundreds, etc. Students can draw or place manipulatives in the appropriate columns.
- **Drawings:** Encourage students to draw representations of numbers using dots, lines, or other symbols to represent different place values.
- **Number Lines:** Number lines help visualize the relative position and value of numbers.

3. Abstract Concepts:

- **Expanded Form:** Teach students to write numbers in expanded form (e.g., 345 = 300 + 40 + 5). This reinforces the understanding that each digit's value depends on its position.
- **Place Value Language:** Use precise language like "tens place," "hundreds place," and "value of the digit."
- **Connecting to Real-World Contexts:** Use money (dollars, dimes, pennies) or measurement (meters, centimeters) to provide real-world examples of place value.
- **Skip Counting:** Skip counting by 10's, 100's, etc. reinforces the patterns within our base ten system.

B. Strategies for Telling Time

Teaching someone to tell time, especially with an analog clock, can be a gradual process. Here's a breakdown of effective strategies:
https://youtu.be/HrxZWNu72WI?si=jRfE8ngUk_YhfwL0

1. Start with the Basics:

Introduce the Clock's Parts:

- Explain the hour hand (short hand) and the minute hand (long hand).
- Point out the numbers 1 through 12.
- Explain that a clock is a circle that represents a whole 24 hour day, that we normally break into two 12 hour sections.

Understanding Hours:

- Begin by teaching how to tell time to the hour (e.g., 1:00, 2:00, 3:00).
- Emphasize that when the minute hand points to 12, the hour hand indicates the hour.

Digital Clocks: If possible, start with digital clocks. They are much more straight forward, and can build a base of understanding of what time actually is.

2. Progress to Minutes:

Minutes in 5-Minute Intervals:

- Explain that the space between each number on the clock represents 5 minutes.
- Practice counting by 5s around the clock (5, 10, 15, 20, etc.).
- Teach how to tell time to the nearest 5 minutes (e.g., 1:05, 1:10, 1:15).

Minutes in 1-Minute Intervals:

- Once comfortable with 5-minute intervals, explain the smaller tick marks between the numbers, representing individual minutes.
- Practice telling time to the exact minute.

"Half Past" and "Quarter Past/To": Introduce common phrases like "half past" (30 minutes), "quarter past" (15 minutes), and "quarter to" (45 minutes).

3. Practical Activities:

Hands-on Practice:

- Use a practice clock with movable hands.
- Have the learner set the clock to different times.
- Play games where you call out a time, and the learner sets the clock.

Real-Life Connections:

- Relate telling time to daily routines (e.g., "We eat breakfast at 7:00," "School starts at 8:30").
- Point out the time on clocks throughout the day.

Worksheets and Games:

- Use worksheets to reinforce learning.
- Play online or board games that involve telling time.

AM and PM: Once a student understands how to tell time on a clock, it is important to teach the difference between AM and PM. Relate this to daily events, like morning and night

C. Strategies for Telling about Money

Teaching someone about money involves several layers, from recognizing different denominations to understanding financial concepts. Here's a breakdown of strategies:
https://youtu.be/GtlL_5Ct5rU?si=CogjzWW368qcJofC
https://youtu.be/8XpEQMgIJHQ?si=zrWqoRY8fvHu_yuh

1. Identifying and Understanding Currency:

- **Concrete Examples:**
    - Start with real money. Let children handle coins and bills, observing their sizes, colors, and textures.
    - Create a "money chart" displaying each coin and bill with its value.
- **Sorting and Matching:**
    - Have learners sort coins and bills into groups.
    - Play matching games where they pair a coin or bill with its corresponding value.
- **Value Recognition:**
    - Emphasize the value of each denomination. For example, explain that five pennies equal one nickel.
    - Use visual aids to show how different combinations of coins and bills can equal the same amount.

2. Counting and Calculating:

- **Counting Practice:**
    - Begin with counting individual coins, then progress to counting groups of coins.
    - Practice counting by 5s and 10s to count nickels and dimes efficiently.
    - Gradually introduce counting combinations of coins and bills.
- **Making Change:**
    - Role-play scenarios where learners buy items and make change.
    - Start with simple transactions and gradually increase the complexity.
- **Real-Life Applications:**
    - Involve learners in real-life shopping experiences.
    - Let them pay for small items and check the change.

3. Financial Concepts:

- **Saving:**
    - Explain the importance of saving money for future goals.
    - Encourage learners to set saving goals and track their progress.
    - Use a clear jar or piggy bank to visualize savings growth.
- **Spending:**
    - Discuss the difference between needs and wants.
    - Help learners make informed spending decisions.
    - Introduce the concept of budgeting.
- **Earning:**
    - Connect money to work and earning.
    - Discuss different ways people earn money.

Day 11

Activity 11.2:Concepts of Fractions: Understanding basics (1/2, 1/4)

Word Problems & Understanding of simple math stories

INSTRUCTION:

1.Work in groups and perform the assigned activities from handout 11.2, which is based on concepts of Fractions,word problems and simple mathematics stories.

2.Work on the case study given in handout and answer the following questions

a) What do you think what teaching strategy did Mrs. Salma adopted?
b) How she has carried out her planned activity?
c) What type of other skills she used to develop the conceptual understanding of Students?
d) What do you think, how much Mrs. Salam's teaching strategy was helpful in students learning?

3.Have a large group discussion on case study of **handout 11.2 interactively .**

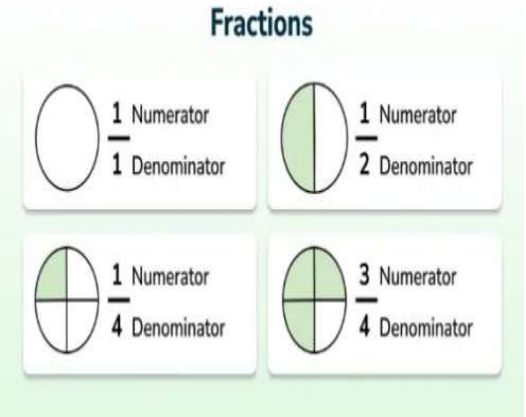
Handout # 11.2

Concepts of Fractions: Understanding basics (1/2, 1/4)

Word Problems & Understanding of simple math stories

Fractions

- Fractions are numerical expressions used to represent parts of a whole or ratios between quantities. They consist of two numbers separated by a horizontal line called a vinculum, where the number above the line is called the '**Numerator'** and the number below the line is called the '**Denominator'**.



https://www.geeksforgeeks.org/fractions/

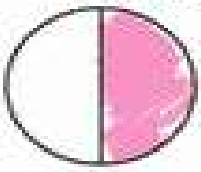
- Fractions show how many equal parts we have from a whole
  Slice a pizza, and we get fractions:

$^1/_2$ $^1/_4$

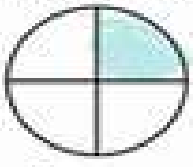
(One-Half) **(One-Quarter)**

The top number says how many slices we **have.**
The bottom number says how many equal slices the whole pizza was **cut into**.
https://www.mathsisfun.com/definitions/fraction.html

Halves and Fourths



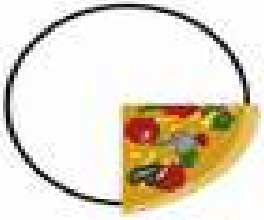
$\frac{1}{2}$ 1 part is shaded / 2 parts in total



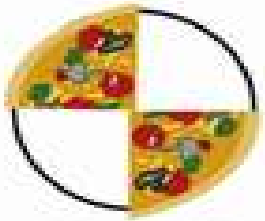
$\frac{1}{4}$ 1 part is shaded / 4 parts in total

Answer each question below with $\frac{1}{2}$ or $\frac{1}{4}$.

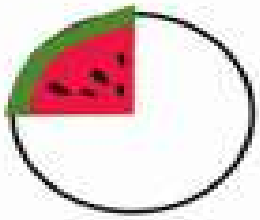
How much of the pizza is left?



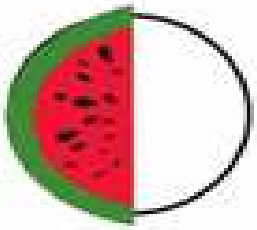
How much of the pizza is left?



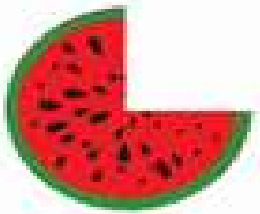
How much of the pizza is left?



How much of the watermelon is left?



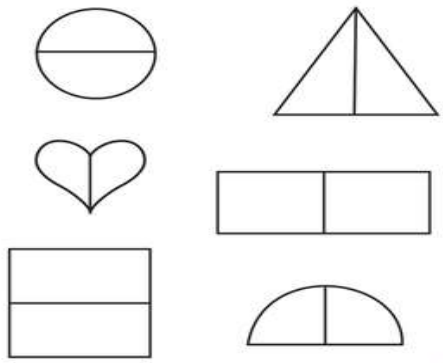
How much of the watermelon is left?



How much of the watermelon is eaten?

Coloring 1/2

Color in the fraction of each shape written below it.

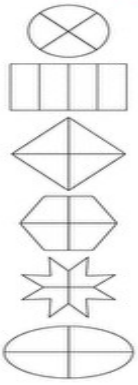


Name _____ Date _____

Fraction Coloring!

Color one-half blue.

Color one-fourth red.



Word Problems

Definition

A mathematical problem expressed entirely in words typically used as an educational tool.
https://www.merriam-webster.com

- Word problems are often seen as a way to bridge the divide between real life and the mathematics classroom. However, students across the world often perform poorly in tests involving word problems. Even when students have mastered the technical competencies of doing mathematical operations such as addition, subtraction, multiplication or division, they can still find it hard to work out solutions to word problems that involve applying of those mastered techniques (Morales et al., 1985).
- A word problem in math is a math question written as one sentence or more that requires children to apply their math knowledge to a 'real-life' scenario.

This means that children must be familiar with the vocabulary associated with the mathematical symbols they are used to, in order to make sense of the word problem.

Isn't brilliant arithmetic enough?

In short, no. Students need to build good reading comprehension, even in math. Overtime math problems become increasingly complex and require students to possess deep conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

As students' progress through their mathematical education, they will need to be able to apply mathematical reasoning and develop mathematical arguments and proofs using math language. They will also need to be dynamic, applying their math knowledge to a variety of increasingly sophisticated problems.
https://thirdspacelearning.com

Understanding of simple math stories

Word problems seen as stories

Pause for thought

Thinking about your own classroom, how are word problems perceived by your students? Do they like them? Do they struggle with them? Why do you think this is? Think back about your experiences as a mathematics learner, how did you perceive word problems? What helped you to understand how to approach them?

Word problems can play a significant role in making school mathematics meaningful and contextual for students. Along with connecting everyday reasoning with classroom context, they can also connect school mathematics with everyday situations and everyday problems, and vice versa. It is therefore very important that students are exposed not only to solving word problems, but also to constructing them themselves. When working with word problems, difficulties can occur as students try to make sense of the context and come across words and expressions that are not familiar to them, or when they cannot visualize the context of the word problem.

An effective way to help students is by considering word problems as stories. Students tend to like stories and are familiar with them. Stories often catch the interest and attention of the students, who might even be well versed in creating stories themselves. They know that stories can be completely fictitious – but equally they can take place in contexts that are familiar to the students. Research shows that asking students to develop a story or narrative as part of their learning activities can help understanding. Bruner (1986), an influential educationalist, argues this is the case because 'human beings are essentially narrative beings, telling stories to themselves and others as a way of making sense of the world' (Mason and Johnson-Wilder, 2004, p. 68).

Making drawings or using hands-on teaching aids (manipulatives or props) to depict the story or word problem can also help students to understand the problem and physically see the relationships between different variables.

A Case Study: The story of Saba

I am Mrs. Salma, a teacher of Class one. I planned to start teaching addition to my students. I believe that for mathematics to make sense to the students, they need to place mathematical concepts in a context; hence, I try to give plenty of concrete experiences whenever I start with any new mathematical topic. So, when starting my lessons on addition, I told a short story about a girl named Saba who loved collecting marbles. I had a box of marbles on my desk.

One fine day, Saba was playing in the garden and saw some marbles lying on the ground. She was very happy and decided to collect them. She found three marbles at first. (Now I ask Ahsan, a student, to count three marbles loudly and take them out of my collection of marbles.) I continued with the story: as Saba moved around and looked for more, she found four more marbles.

(Now Ahsan takes out four more marbles.)

I then asked the students: how many marbles did Saba find in total?

Ahsan raised his hand to answer. I asked Ahsan to share with the whole group how he found the answer. Ahsan explains how he counted to find out the total number of marbles.

Continuing the story, I said that Saba kept moving as she thought she should check the whole garden. As she neared a bench, she saw that there were some more marbles lying under it. She found two more marbles. I then asked the students to count and tell me how many marbles Saba would now have. I added two more similar steps.

I then shared similar short stories with my students and asked them to find out the total number of things, such as buttons, pencils, pebbles, etc.

After this I started asking how many biscuits there will be in total if one student has three biscuits and another one has two biscuits, and so on. For each problem, I first drew the objects "Three biscuits and two biscuits."

Then I wrote the numerical representation on the blackboard as I spoke:

Three biscuits and two biscuits together become five biscuits.

3 biscuits + 2 biscuits give 5 biscuits

At this point, I introduced the symbol '+' for addition and then I introduced the symbol '='for equivalence.

Then I wrote the expression '3 + 2 = 5'. I then reminded the students of the story of Saba and the marbles, and asked them how I should draw this. On their instructions I drew the marbles on the blackboard and wrote the mathematical expression. Together we drew many more 'adding' stories on the blackboard using the '+' and '=' symbols.

www.TESS-India.edu.

Activity 11.3:Basic Shapes: Identifying shapes (circle, square, triangle)
Measurement: Concepts like "big," "small,"
Comparing lengths/weights

INSTRUCTION:

1.Work in groups and perform the assigned activities from handout 11.3, which is based on concepts of basic shapes.Measurement(big& small) and comparison of length /weight.

2.Read and discuss **handout 11.3** and practice the Hands-on activities for classroom from Handout .prepare and present these activities with coordination and collaboration with the help of whole class.

Handout # 11.3

Basic Shapes: Identifying shapes (circle, square, triangle)
Measurement: Concepts like "big," "small,"
Comparing lengths/weights

Basic Shapes

Basic shapes are fundamental geometric figures like circles, squares, triangles, and rectangles that form the building blocks for more complex structures. Understanding these shapes helps students develop spatial awareness and problem-solving skills. To quickly memorize, remember that circles are round, squares have equal sides, triangles have three sides, and rectangles have opposite sides that are equal.
https://www.studysmarter.com

What Children Know and Need to Learn about Shape

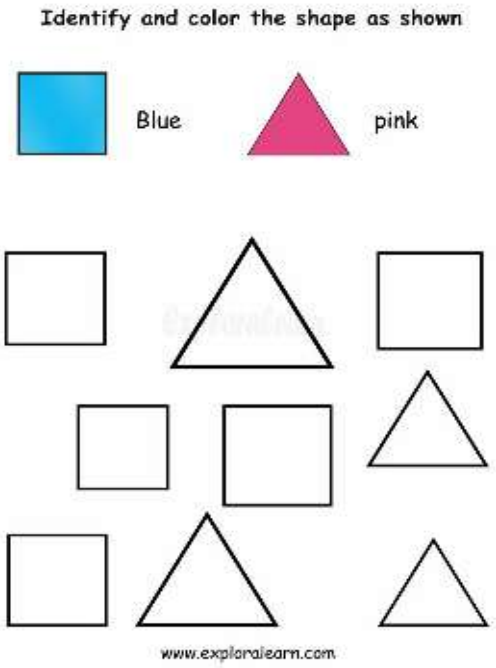
Although children accurately perceive shape and space in their everyday environments, preschool children from about three to five years of age need to learn to think about these topics. Our main educational goal should be to promote understanding of basic geometry.
By Herbert P. Ginsburg and Colleen Oppenzato

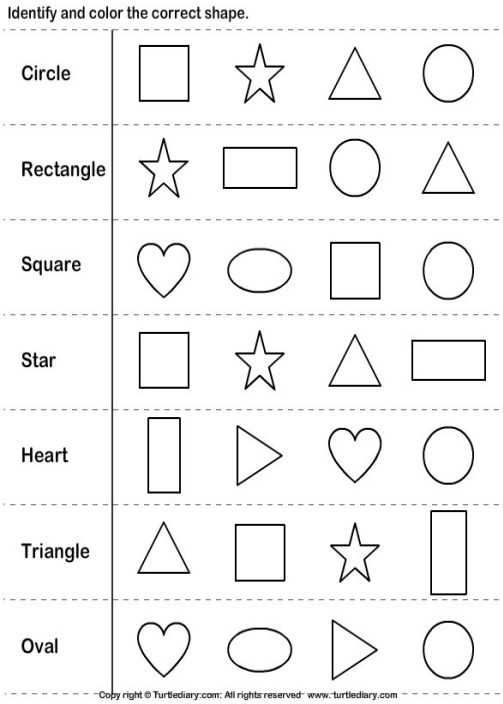
Perception of difference and sameness (Identification)

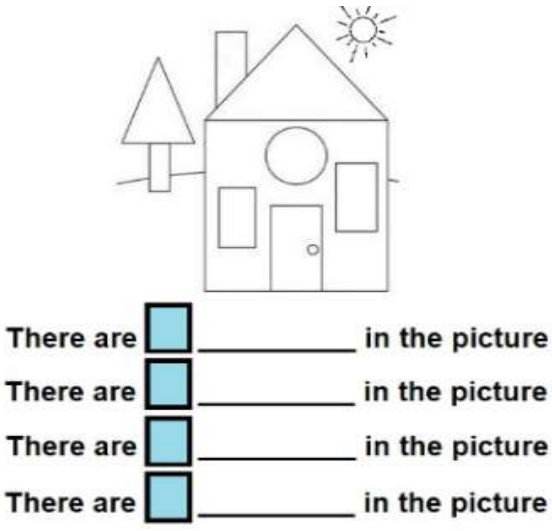
Young children can easily discriminate (see or perceive the differences) between various shapes. For example, asked whether the 2-D shapes in Figure 1 are different, children will quickly agree that they are.
They can also easily discriminate between 3-D shapes, for example, between a rectangular prism (like a book) and a sphere (like a ball), or between a sphere and a cube (like a block with six square faces).

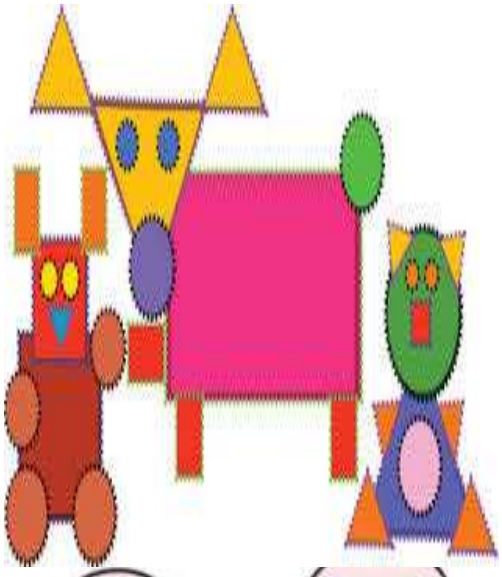
Clearly young children can see differences between triangles and rectangles, and between books and balls. They may even know the names triangle and rectangle. But at the same time, they may not be able to analyze the basis for their discriminations. They may have no knowledge about the properties of triangles and rectangles. They may not understand, for example, that a triangle must have three sides, that it is a closed figure, or that both figures are polygons.

https://prek-math.com









Concept of Big and Small

We use the words **big,** and **small** to express the sizes of objects. **Examples:** Look at the bottles in the given picture. Here, the yellow bottle is **small** and the blue bottle is **big**.

- By observing the size of an object, we can say it is **big** or **small**.
- We do not use the words big or small for comparing the sizes of objects.
- We cannot say the yellow bottle is small than the blue bottle in the above example.
- For **comparing** the sizes, we use the words; **bigger, smaller, biggest, smallest**.

'Bigger or smaller' is used when we compare **two objects** based on their sizes.

Examples

In the given picture, the lion is **bigger** than the rabbit. The rabbit is **smaller** than the lion. **'Biggest and Smallest'** is used when we compare **three or more** based on their size.

Examples:

In the given picture, the **green** bag is the **biggest** and the **pink** bag is the **smallest** among all the given bags.

Measurement Big and Small

The student will clearly understand the big and small concepts and misconceptions related to this.

Also, they will identify

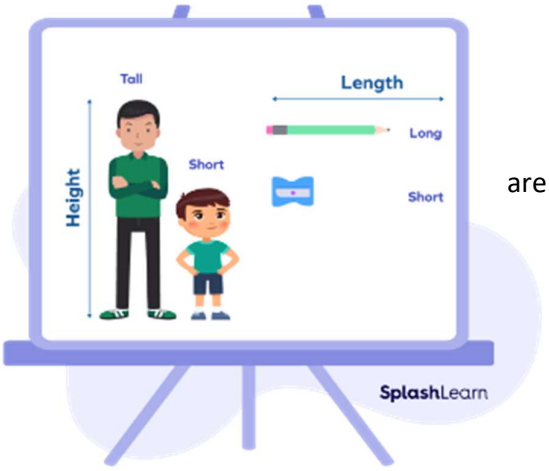
- Bigger and smaller things among two or more things,
- Biggest and smallest things among two or more things

Each concept is explained to class 1 math students with examples and illustrations, and a concept map is given to summarize the idea. At the end of the page, two printable worksheets with solutions are attached for students to practice.

Misconception

In the given picture, the boy thinks that the dog is bigger than the house. Is it true? No. Why the house is looking smaller than the dog? Think about it. The house is far away from the boy and the dog is near to him. So, the house is looking smaller than the dog. Sometimes, to compare objects, they must be at equal distance from us.

Measurement:



Measurement is a system to measure the height, weight, capacity or even amount of certain objects. We can measure how long things are or how tall or how far two things are.
For example: The height of Oliver is 100 inches and the height of the giraffe is 150 inches.

Length

The amount of something that is measured from one end to the other along the longest side is called its length.

Length is measured in centimeters, meters, kilometers, feet, and miles. Length of a given object describes how long things are or the distance between two points. Length helps us to identify the size of an object, how tall or long an object is or the distance from one point to another. When we measure the size of an object horizontally, it is known as length, whereas, when we measure the size of an object vertically, it's known as the height of an object.

Weight

The amount of matter a thing consists of is called its weight. Measuring weight means to measure the heaviness of a thing.

Weight tells us how heavy or light an object is. Let us look at all measurement units of weight that we commonly use.

Weight can be measured in grams, kilograms, and pounds. The metric units of measuring weight are kilogram (kg) and gram (g)

https://www.splashlearn.com

Comparing Length and weight

Key Learning points:

- Length is used to measure the size of something.
- Weight or mass is used to measure how heavy something is

- Lengths can be compared using longer, taller and shorter.
- A length can be the longest tallest or the shortest of a set of measurements.
- Height is a type of length.
- Lengths can be equal to one another.
- Objects can be ordered by height and length.

Key Words:

- **Length** - How long from end to end.
- **Height** - How tall from bottom to top.
- **Longest** - The object in a set that is longer than all the others.
- **Shortest** - The object in a set that is shorter than all the others.
- **Tallest** - The object in a set that is taller than all the others.

Activity 11.4:Understanding Measurement: Non-standard units & Standard/non-standard unit

INSTRUCTION:

1. 1.Work in groups and draw any animal picture or living room object on the given sheet of any size. (They may also color in their drawn picture).measure their drawn picture with the help of scale and write their measurement and share with whole class.
2. Measure any big object that they found in their surrounding and note down its measurement in their note book (for this activity participant make take out if possible)and share that measurement with whole class..

3.Read and discuss **handout 11.4** and and tell what type of measurement they have done.write their findings and share with whole class.

Handout # 11.4

Understanding Measurement:

Non-standard units & Standard/non-standard unit

Standard Units of Measurement

Most measuring tools and instruments, such as a ruler or a scale, use standard units of measurement.

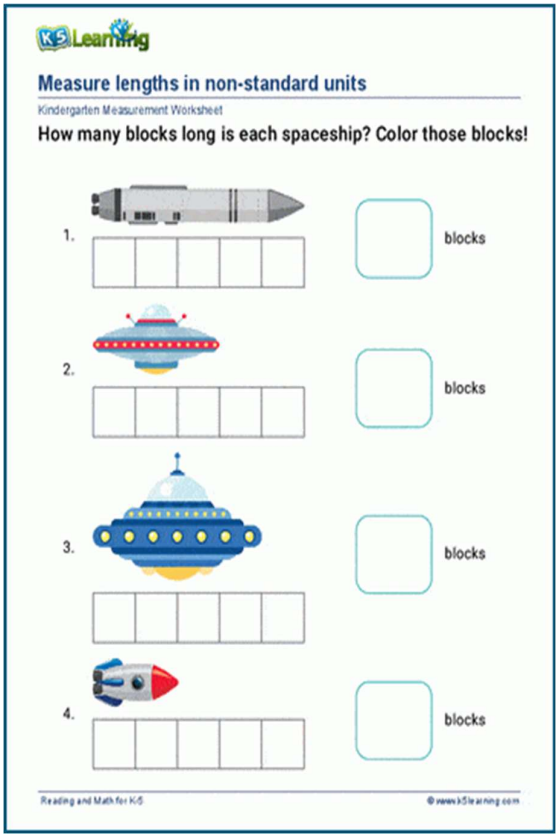
A standard unit is the most commonly used unit of measurement. These units are standardized, meaning that everyone has the same understanding of the size, weight, and other properties of an object. Standard Units of Measurement are fixed values and those values cannot change.

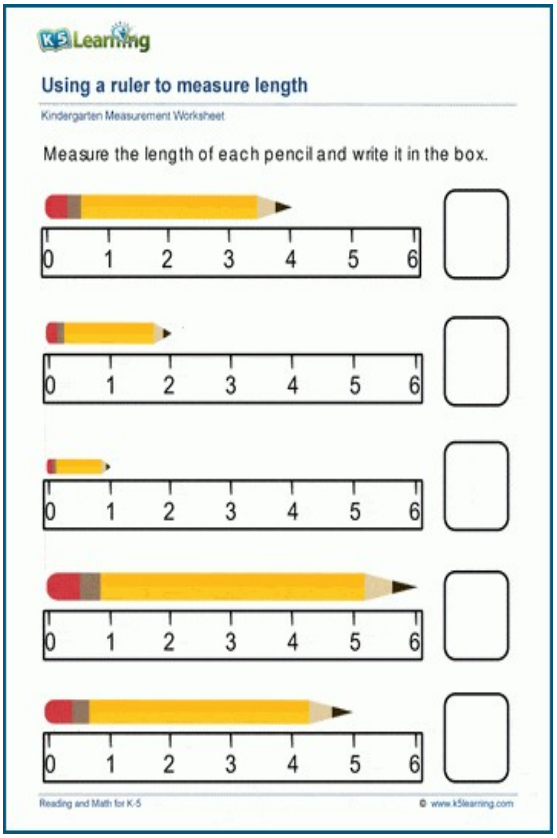
https://study.com

Non- Standard Units of Measurement

Non-standard units of measurement are units of measurement that aren't typically used, such as a pencil, an arm, a toothpick, or a shoe.

Non-standard measurement lengths include finger width, pace, hand span, foot span, arm span, and a cubit. These units were used before the introduction of standard measurement units like rulers, measuring tapes, and metric sticks.




K5 Learning
Using a ruler to measure length
Kindergarten Measurement Worksheet
Measure the length of each pencil and write it in the box.
0 1 2 3 4 5 6
0 1 2 3 4 5 6
0 1 2 3 4 5 6
0 1 2 3 4 5 6
0 1 2 3 4 5 6
Reading and Math for K-5
© www.k5learning.com

Handout # 11.5

Teaching and Learning Strategies of Foundational Numeracy: 'Fraction, Word Problem' Shapes and Measurement' in Monograde & Multi-grade Classroom through cooperative learning strategies

Teaching Learning Strategies Shapes:

- When kids learn to identify shapes, they also learn to distinguish between objects and categorize things
- Learning shapes can help kids with counting, problem-solving, patterns, and spatial recognition
- Parents can help by pointing out shapes in everyday life, providing toys that use shapes, and playing games that teach shapes with their kids
- A play-based learning membership can help kids recognize shapes and develop the other essential building blocks of learning

Innovative Activities for Learning Shapes

1. Shape Books

What You Need

Paper (colored and plain), Kid-safe scissors, Stapler, Markers

What to Do:

- Start with a circle book. Help your child cut out 2 circles from colored paper. These will be the front and back covers of the book.
- Cut out a dozen or so circles of the same size. These will be the internal pages.
- Staple the front cover, inside pages, and back cover together.
- Help your child make the cover page by writing this is my book about circles (or something similar).
- Brainstorm objects that are shaped like a circle—wheel, moon, pie, and others.
- Your child can draw one object on each page of the book.
- Help them write the name of the shape under the drawing (or write it for them if they haven't learned to write yet).

Make as many different shape books as you want!

For more examples visit: https://www.beginlearning.com/parent-resources/learning-shapes/

How to teach children to solve word problems?

Here are two simple math strategies for problem solving that can be applied to many word problems before solving them.

1. What do you already know?
2. How can this problem be drawn/represented pictorially?

Let's see how this can be applied to word problems to help achieve the answer.

Word problems in kindergarten

Throughout kindergarten a child is likely to be introduced to word problems with the help of concrete resources (manipulatives, such as pieces of physical apparatus like coins, cards, counters or number lines) to help them understand the problem.

An example of a word problem for kindergarten would be

Chris has 3 red bounce balls and 2 green bounce balls. How many bounce balls does Chris have in all?

Word problems in 1st grade

First grade is a continuation of kindergarten when it comes to word problems, with children still using concrete resources to help them understand and visualize the problems they are working on

An example of a word problem for first grade would be:

A class of 10 children each have 5 pencils in their pencil cases. How many pencils are there in total?

Word problems in 2nd grade

In second grade, children will move away from using concrete resources when solving word problems, and move towards using written methods. Teachers will begin to demonstrate the adding and subtracting within 100, adding up to 4- two-digit numbers at a time.

This is also the year in which 2-step word problems will be introduced. This is a problem which requires two individual calculations to be completed.

Word problems in 3rd grade

At this stage of their elementary school career, children should feel confident using the written method for addition and subtraction. They will begin multiplying and dividing within 100.

This year children will be presented with a variety of problems, including 2-step problems and be expected to work out the appropriate method required to solve each one.

3rd grade word problem: number and place value

My number has four digits and has a 7 in the hundreds place.

The digit which has the highest value in my number is 2.

The digit which has the lowest value in my number is 6.

My number has 3 fewer tens than hundreds.

https://thirdspacelearning.com

Fraction word problems for Year 2

Word problems in age 5 to 7 years involve recognizing and naming simple fractions and beginning to understand the concept of equivalence.

Question 1

Maisie was having a birthday party.

She invited 16 friends. Half of her friends were from her class and a half were from the other Year 2 class.

How many friends did she invite from each class? Answer: 8 friends

1/2 of 16 = 8

Question 2

Ahmed baked 12 cookies.

He ate ¼ of them.

How many cookies did Ahmed eat?

Answer: 3

¼ of 12 = 3

Question 3

Sara says 'I ate 1/2 a pizza and my friend ate 2/4. My friend had more than me, as she had 2 pieces'.

Is she correct? Explain why you have chosen your answer.

Answer: Sara is not correct

2.1.1.1. 1/2 is the same as 2/4

Question 4

Tom and Zeyn shared a chocolate bar.

They both had a quarter of the chocolate bar.

How much was left?

Answer: 1/2 of the chocolate bar

2/4 are equivalent to 1/2

Collaborative Math Activity: *Geometry Concentration*

Have students work together to practice matching basic geometry vocabulary terms with their corresponding geometric figures. Download everything you need to start playing the *Geometry Concentration* Game in your classroom. This ready-to-go activity for Kindergarten through Grade 3 contains four sets of cards. Included you'll find:

- Basic Set
- Basic Set, Shapes in the Real-World
- Advanced Set
- The basic sets are appropriate for every student in the early grades. The advanced sets are appropriate for above-average students in Grades 1 or 2 and for any Grade 3 student.

- Advanced Set, Shapes in the Real-World

Collaborative Math Activity: Math Land Game Boards

There are different downloadable Math Land Game Boards for each grade, from Grade 1 to Grade 6. Students can practice their computational skills as they move along the path. Each group will need colored counters and a die to roll to play this board game.
For more details visit: https://www.sadlier.com/school/sadlier-math-blog/5-math-activities-that-promote-student-collaboration-in-the-classroom-collaborative-learning

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Day 12

Activity 12.2:The Importance of Action Planning for Foundational Literacy and Numeracy Skills

INSTRUCTION:

1.Brainstorm about the importance of Action Planning for Foundational Literacy and Numeracy Skills.

2.Work in groups on handout 12.2 for better understanding of Action Planning note down the key concept of action planning and share with whole class interactively.

Handout # 12.2

The Importance of Action Planning for Foundational Literacy and Numeracy Skills

Action planning for foundational literacy and numeracy (FLN) skills in schools is absolutely critical. Here's a breakdown of its importance:

Why Action Planning is Essential:

- **Structured Improvement:**
  - An action plan provides a clear roadmap. It moves schools from general goals to specific, measurable steps. This structure ensures that efforts are focused and efficient.
- **Targeted Interventions:**
  - Action plans allow schools to identify specific areas where students are struggling. This enables them to implement targeted interventions, addressing the root causes of learning gaps.
- **Resource Allocation:**
  - Effective planning helps schools allocate resources (time, personnel, materials) strategically. This ensures that resources are used where they will have the greatest impact.
- **Progress Monitoring:**
  - Action plans include mechanisms for monitoring progress. This allows schools to track student growth, evaluate the effectiveness of interventions, and make adjustments as needed.
- **Teacher Empowerment:**
  - When teachers are involved in action planning, they gain a sense of ownership and empowerment. This can lead to increased motivation and commitment to improving FLN outcomes.
- **Equity and Inclusion:**

- Action planning can help schools address equity gaps by ensuring that all students, regardless of their background, have access to high-quality FLN instruction.

- **Building a Strong Foundation:**
  - FLN skills are the building blocks for all future learning. A solid foundation in literacy and numeracy is essential for students to succeed in school and in life. Action planning helps ensure that students acquire these essential skills.

- **Long term benefits:**
  - A good foundation in literacy and numeracy has long term benefits for the individual and for the wider society. These skills are essential for participating fully in society, and for economic success

Activity 12.3:Foundational Literacy & Numeracy Action Planning for the School

INSTRUCTION:

1.Develop an Action plan individually according to need of your school.

2.Refer the class to utilize **Handout # 12.3A** & **12.3B** for Action Planning purposes.remember that Handout 12.3A are the target which are derived from the benchmark of foundational Literacy and Numeracy skills

3.Start preparation for their Action Plans for the Field Work which will be helpful for your teaching learning process for foundational Literacy and Numeracy skills.

Handout # 12.3A

Targets of Foundational Literacy &Numeracy Action Plan for the School

Stage	Target Foundational Literacy skills	Target Foundational Numeracy Skills	Suggested Strategies/Activities
Early childhood & care education (year 1)	• Phonemic Awareness: Recognizing • Rhymes and beginning sounds. • Alphabet Knowledge: Recognizing letters and sounds. • Basic Vocabulary: Learning words through stories and conversation.	• Number Recognition: Recognizing numbers (up to 10). • Counting: Objects and one-to-one correspondence. • Basic Shapes: Identifying shapes (circle, square, triangle). • Measurement: Concepts like big, small and full	Storytelling, Listening Songs, Rhymes Naming objects Matching sounds with Pictures Holding books Matching shapes, fruits, vegetables Sequencing things (big, small) and stories.
Early childhood & care education (year 2)	• Letter-Sound Correspondence: Matching letters to sounds. • Word Recognition: Recognizing • common words (e.g., "the"). • Simple Reading: Read simple • words of 2 to 3 letters. • Writing: Simple words/phrases, • Phonics: Fluently decoding word	• Counting & Number Sense: Up to 20. • Recognizing/creating sequence: Numbers/Patterns/Objects/shapes: (e.g., ABAB). Measurement: Comparing lengths/weights.	Blending & Segmenting the sounds to make words Picture books, labeling items, vocabulary games Asking and answering questions about stories. Action words, describing feelings, picture books Sound/Number manipulation activities, interactive games Drawing pictures and labeling the Games and activities to reinforce foundational literacy and Numeracy learning skills
Grade 1	• Phonics: Fluently decoding words. • Reading: read small sentences	• Read and Write: Numbers up to 99 • Addition/Subtraction: Single digit (within 10).	Reading and writing long vowel words, phonics readers Story

	of 4 to 5 simple words with basic comprehension. • Writing: Simple sentences (at least 3 to 4 words). **Comprehension: Identifying main story elements.**	• Place Value: Understanding place value (units and tens). • Measurement: Non-standard units (e.g., blocks). • Word Problems: Understand simple math stories.	mapping, identifying story elements Matching synonyms and antonyms, word games Interactive games, context clue exercises Games of place value Story planning, sharing and discussing stories Creating and understanding compound words, activities
Grade 2	• Reading Fluency: More fluency with short stories. • Vocabulary Expansion: Learning complex words (4 to 5 letter words). • Writing: Simple 3 to 4 sentences paragraphs. • Comprehension: Detailed text analysis(setting plot)	• Read and Write: Numbers up to 999 • Addition/Subtraction: Two-digit numbers. • Multiplication/Division: Introductory concepts. • Place Value: Understanding hundreds. Time: Telling time.	Story planning, sharing and discussing Identifying characteristics, comparing texts stories Using adjectives and adverbs, Discussing differences, sorting book sentence expansion Writing simple sentences Handel number operations Telling time activities
Grade 3	• Reading Comprehension: Longer texts, identifying details. • Writing: Multi-paragraph texts. • Fluency: Expressive reading. • Vocabulary: Context-based word meanings. • Vocabulary: Context-based word meanings.	• Multiplication/Division: three-digit numbers. • Fractions: Understanding basics (1/2, 1/4). • Measurement: Standard/nonstandard units. Time & Money: Reading to nearest minute, counting money.	Interactive reading activities, summarizing games Writing opinions with supporting reasons, organizing paragraphs Reading and spelling r-controlled vowels, phonics activities Matching synonyms and antonyms, word game Three digit multiplication /Division Games Fraction stories & games Money utilization games

Handout # 12.3 B

Foundational Learning Action Plan for the School

Name: _____ **School: _____**

Taluka: _____ **District: _____**

Sl. #	Target	Activities	Materials Needed	Timeline	My Goal is Met When	Date When Action Completed
1						
2						
3						
4						
5						

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